

TEN CENTS

AUGUST 1930

The American Home

10¢



A Spanish Colonial House for the South and West
The complete floor plans are given on page 490

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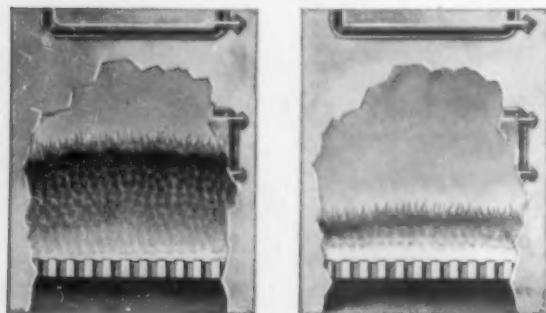
mendation of other Spencer owners, than through any other source.

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*Everybody knows that ordinary heaters require refueling frequently as the fire burns to ash. With a Spencer, fuel is put only once a day into the magazine—illustrated below at (A). Fuel covers the grate to a sloping level controlled by the magazine mouth (B). The fire bed stays at the level shown at (C), for as fuel burns it shrinks to ash (D) and settles on the Gable-Grate (E). As the fire bed shrinks more fuel feeds down automatically from the magazine, which holds enough fuel to feed the fire for as long as 24 hours, with only one shaking of the grates.

FLAT GRATE HEATER

Showing how burning fuel shrinks away to ash—heater must again be refueled

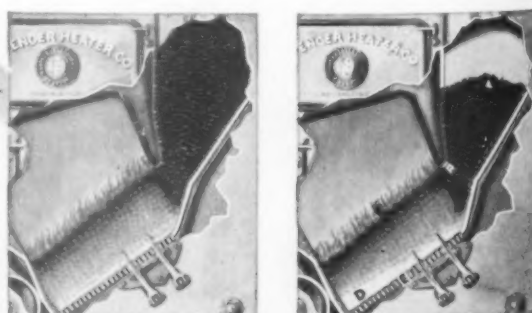


FIRE BURNS UPHILL
FUEL ROLLS DOWN

SPENCER
Magazine Feed
HEATERS
for steam, vapor or hot water

SPENCER MAGAZINE FEED HEATER

*The shrinkage of burning fuel lets more fuel feed automatically from the magazine**



The unrestrained beauty of the
clambering rose bushes and the
dignified hollyhocks is sur-
passed only by the charm of the
happy, roguish, little figure in
the doorway



Photograph by H. Armstrong Roberts

The American Home

AUGUST 1930

VOLUME IV

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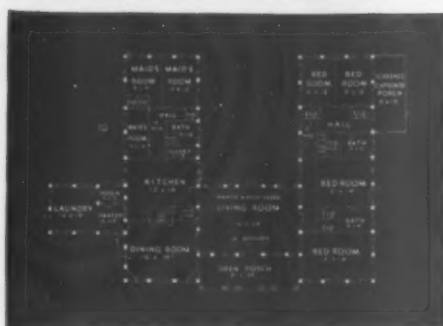
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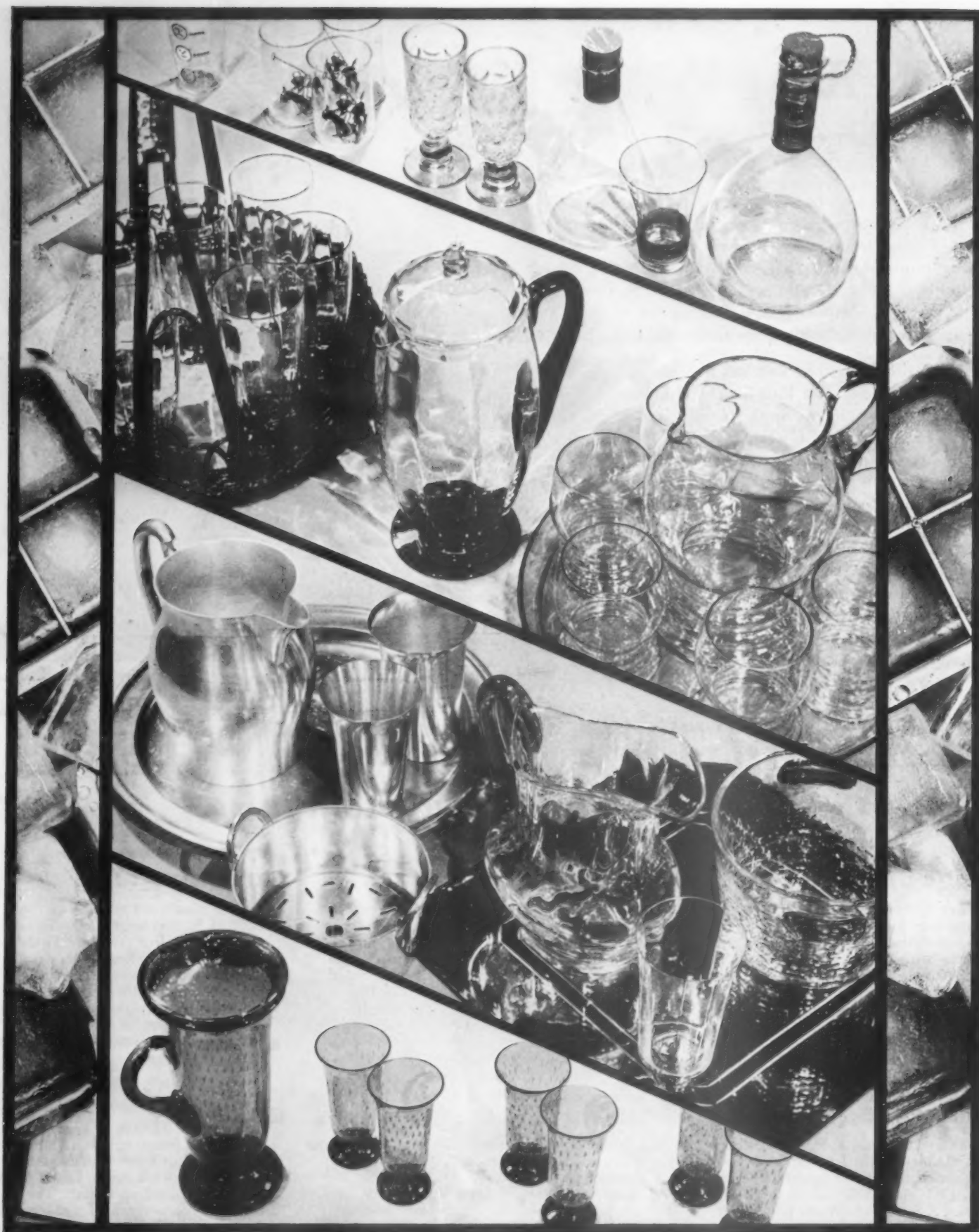
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H. Victor Keppler

COOLING THE INTERIOR

In the upper row the "Going, Going, Gone" glass and the heavy thumb-print goblets are from Mitteldorfer Straus, Importer, while the glasses with polo players in colored enamel, and the Mexican set (wound with colored raffia) are from Lord & Taylor. In the second row, left to right, the black basket with covered pitcher and glasses with black bases are from Stern Brothers,

and the set of round tray, pitcher, and glasses is from Gimbel Brothers. In the third row are a charming pewter set with ice-bowl and a very attractive set of thick glass with black handles standing on a base of black glass, both of which are from Lord & Taylor. The covered pitcher and glasses in cool green with blown-in raindrops are from R. H. Macy & Co.

Hints for the summer hostess

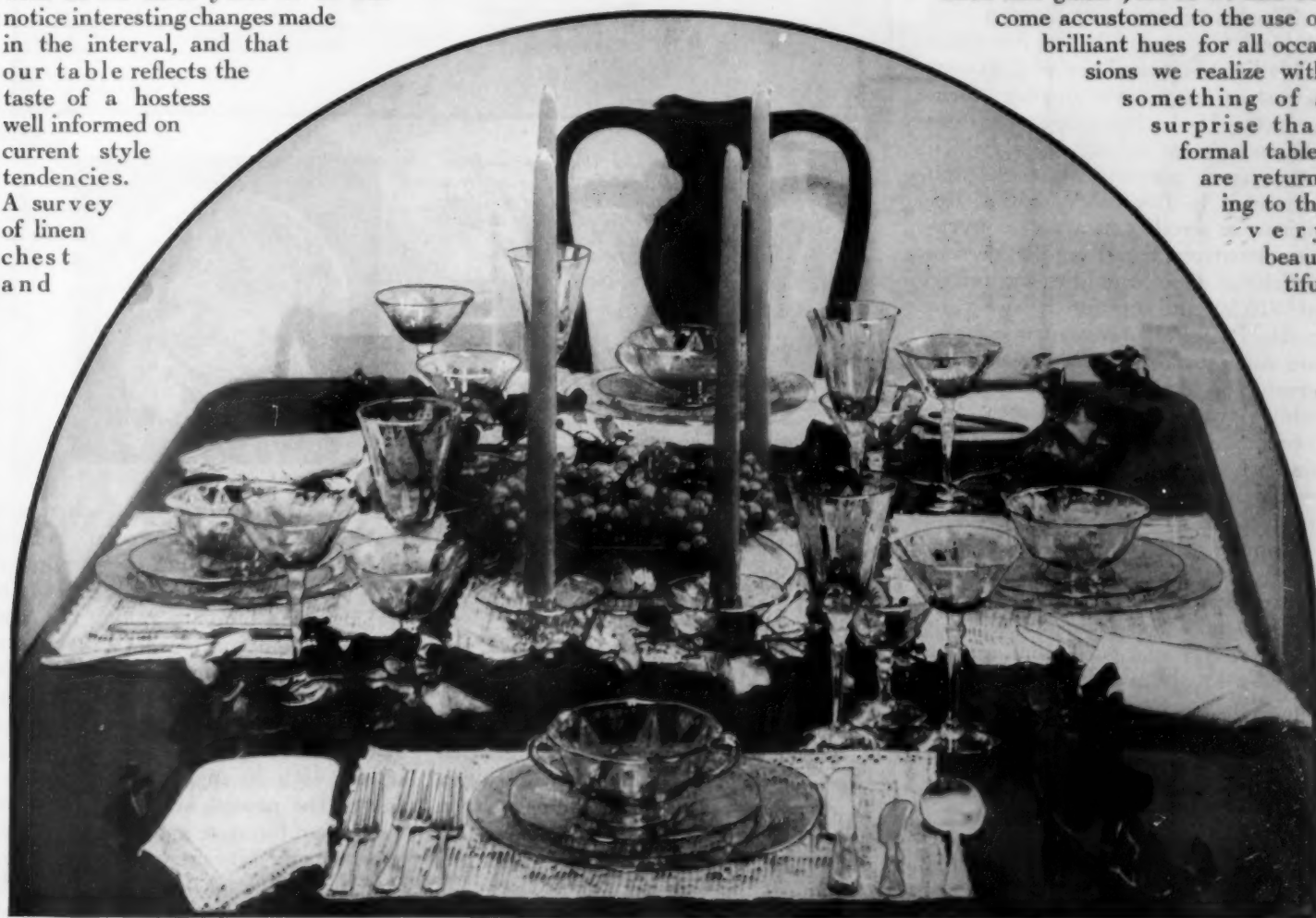
A daintily appointed table spells success

DOROTHY STACEY BROWN

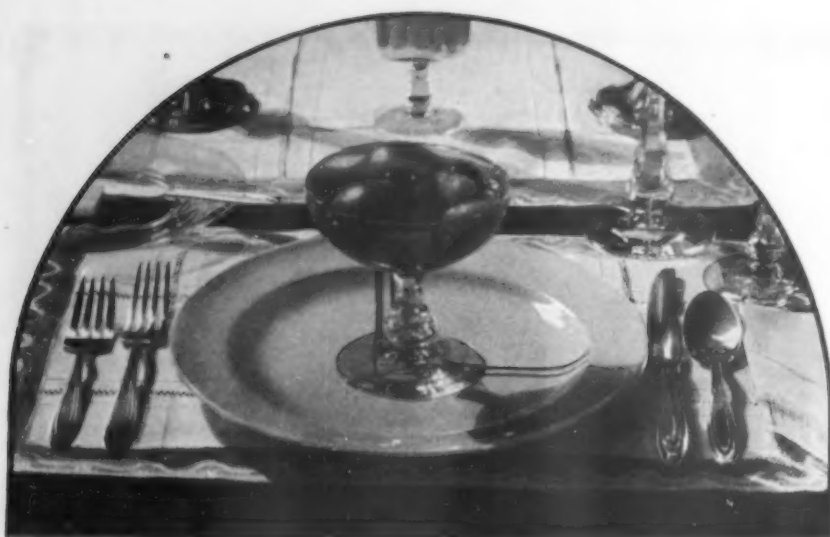
VISITORS in summer have a way of dropping in at the most unexpected times. There are not only the guests expected and planned for, but also those who appear at short notice or with none at all, the cousins who write that they are spending a few days in the neighborhood, the people who are passing through and stay to spend the week-end, the old school friends who materialize suddenly with husbands you didn't know existed. It is all great fun, but it involves planning and thought. We like to be sure that the visitor who has not been with us for three years or so will notice interesting changes made in the interval, and that our table reflects the taste of a hostess well informed on current style tendencies. A survey of linen chest and

china closet may reveal that a few deft touches only are needed to freshen appointments to meet the most critical eye; a piece of flatware, a little new glass, a gay English china luncheon set or an inexpensive purchase of linens will sometimes work wonders. An investigation into new styles is not unlikely to show that tableware long laid away as hopelessly out of date or linens which a few months ago seemed far from modern are now at the height of the mode.

One point to be noted is that our tables are wearing color with a difference, particularly as regards linen and glass. Just as we had become accustomed to the use of brilliant hues for all occasions we realize with something of a surprise that formal tables are returning to the very beautiful



Topaz glassware lends a cool effect to this well appointed summer table. (Glassware from Fostoria Glass Co.; linen and table from Lord & Taylor; silver from International Silver Co.)



With the return of crystal glass for formal occasions has come the use of an engraved monogram. The luncheon set is of pale yellow handkerchief linen. (Courtesy, R. H. Macy & Co.)

simplicity of white damask and rock crystal. This trend however, far from banishing color, will have the effect of emphasizing its beauty for an occasional formal appearance and more especially when used in the gay, informal meals and parties of summer.

The hostess who wondered during the last few years whether her white table linens marked her as ultra conservative may now display them proudly. If she is buying new ones she may choose among designs which range from geometrical blocks and pyramids to Louis XV motifs, Renaissance scrolls and a new conventional pattern based on the Persian artichoke. Good qualities are priced at \$10.00 and up for a two-yard cloth. Pastel shades in damask also are much shown, usually in gold, pale green, or orchid, combined with white; two of the most attractive versions are a sunburst pattern and one whose use of lines and angles would harmonize well with modern patterns in flatware.

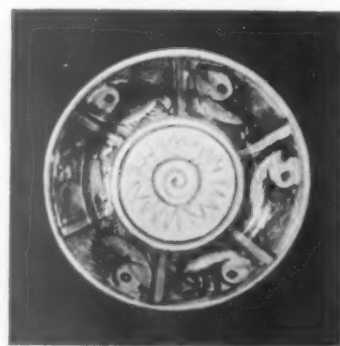
Among the most beautiful table linens used this season are those in the ivory, ecru, eggshell, and sand shades which lend themselves so well to building up harmonies with china and glass. A very lovely example, called "Ecrumar," has a tiny all-over wave design with moiré border; it is of exceptional quality, hand-hemmed, and costs \$40.00, napkins included. Very recently I saw a most effective table which used a pale sand cloth with cobalt blue embroidery around the border, combined with dark blue glasses having cut crystal stems and service plates decorated with wide bands in pale copper tones.

Among sets of linens for more in-



Dull glazed pottery is a new style note and the ware shown above exploits it in leaf green, rose or rust color. The attractive luncheon set and four napkins may be obtained for less than two dollars. (Courtesy of Gimbel Brothers)

This Italian earthenware plate with fish design, and the one on the following page with fowl pattern, show the decorative charm of unsophisticated peasant decoration. (Courtesy, R. H. Macy & Co.)



formal use there is great variety, and lovely things are to be found at extremely moderate prices. With the pottery set above is shown a linen cloth which costs only \$1.49 with four napkins. Under the beverage set in the photograph on the opposite page is an exceedingly smart cotton crash cloth hand blocked in red, yellow, brown, and mauve on a beige ground; it costs \$1.75 and napkins to match are twenty-five cents each. The Basque linen sets in their daring red, blacks, blues, and white are almost indispensable for the summer cottage, especially as they may be found for only \$4.96 for nineteen pieces. More formal, but still inexpensive, is the thirteen-piece luncheon set

shown at the top of this page; it is of pale yellow handkerchief linen edged with lace whose machine manufacture does not appear in its delicacy. With our flatware photograph on the facing page is another thirteen-piece set, with Chinese hand embroidery in green on a natural ground, which would form the basis for a lovely summer table if combined with amber or green glass. It is priced at \$11.89 complete.

Cobalt blue glass, deep amethyst, and burgundy tones are still good and will

remain so for certain special schemes of table setting and decoration, but for summer the paler hues are coming to the fore, and a new golden glass, a faint orchid, and a blue are among the most favored. Combinations of crystal and black are smart and cool looking for bridge sets and summer cold drinks, and crystal that is cut, etched or plain is used for any and every occasion. Cut crystal with an engraved monogram is one of the newest and most beautiful versions of the ware and as the "metal" must of necessity be good, the shapes match it by being very lovely and the stems are finely cut. The wine glass costs \$2.97, the water goblet \$3.49, and other pieces to make up complete

luncheon or dinner sets are priced in proportion.

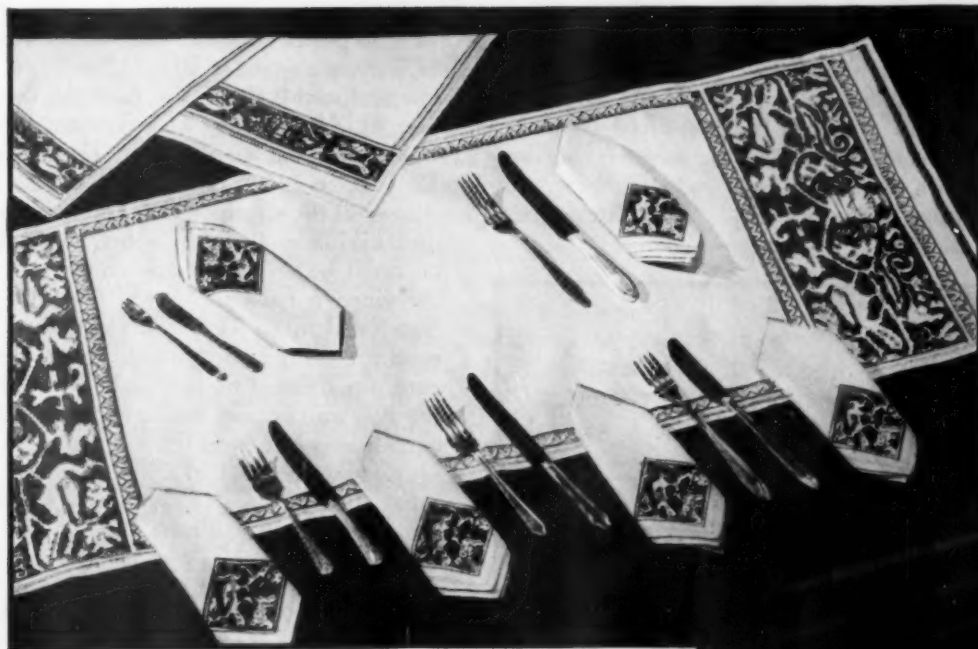
Some hostesses are finding it interesting to buy one of the beautiful pitchers in modern pewter which reproduce old designs and cost only \$3.96. With these appropriate stemware may be combined such as the low, footed glasses with crystal cup and black base that cost only twenty-nine cents each. Exceedingly attractive glass beverage sets are shown this year in the new pale shades, and our illustration shows one in blue glass whose shape is reminiscent of a sixteenth-century roemer. The jug and six tumblers are priced at \$2.95. Other sets in crystal, green, and amber are even less expensive.



china which revives eighteenth-century pictorial decoration with its bold outlines and bright colors is best with white or ivory linen and crystal glass, but with the china of modern feeling which uses only one simple decorative motif the color of the design may be effectively repeated in the glassware. Suzanne Lalique has designed exquisite patterns of miraculous simplicity, using narrow metallic lines, conventionalized flower heads, and touches of color which serve only to accent the shape and structure of the pieces. In a rather similar though less sophisticated mood are the designs that follow sporting motifs—fish on a line, tennis raquets, golf sticks—or which silhouette tiny circus figures in red on a white ground.

One distinctly new, original, and charming departure is the new mat and semi-mat glaze pottery shown in our illustration; there are three colors, leaf green, French rose, and a rust tone

Five new patterns in flatware are shown in the oyster fork and butter spreader, and in the luncheon, salad, dinner, and the newer viande knives and forks. (Courtesy of R. H. Macy & Co.)



As regards the plates and dishes, so many styles in decoration are represented that one may be entirely guided by individual requirements of color scheme or the period of furnishings, but it is more important than ever to make the table a well arranged ensemble with effective contrasts and subtle color harmonies. The newly popular

This beverage set in pale blue glass reproduces a quaint old shape which combines in interesting fashion with a very modern, colored cotton crash cloth. (Courtesy, Gimbel Brothers)



called Sienna brown, each having its own particular glaze and texture. For example the green, whose feeling has been caught by the photographer, has a faint shading and delicate surface which recalls fine old Ming ware. Yet, in spite of its beauty and the delightfully simple shapes of its plates, cups, and jugs, a thirty-two piece luncheon set costs only \$3.95 and open stock prices are as low as ten cents for bread and butter plates.

European hand decorated pottery seems made for summer, especially in the setting of a summer cottage, provincial interior, or for meals on the porch. Italy, Germany, Holland, and Spain have all sent us lovely things for every hour of the day. Such ware is often most attractive in odd plates which may be used separately. Two interesting plates of Italian earthenware, stand on their edges in our illustrations to show the decorative charm of unsophisticated peasant design.

For a long time we have been accustomed to believe that flatware has changed very little since man stopped eating with his hunting knife and invented the fork and spoon. Yet there is something new under the sun—namely the "viande" knife and fork. In both pieces the handle takes up two thirds of the piece and the explanation is, that as no one ever drives his fork the length of the tines into his meat, or needs more than half the blade to cut it, the new shape is quite as efficient as the old one, and more comfortable to hold. The salad knife is another very sensible innovation.

The flatware in our photograph is typical of new patterns, the simplified lines and tapering forms express the modern vogue, yet this very simplicity makes them appropriate for use with either recent or older modes in table decoration.

Down the gypsy trail

*Little things that spell comfort
when camping*

WALTER WARREN

A green and white checked oilcloth luncheon cloth, paper plates and napkins, enamelled plates and cups, chromium plated cutlery, picnic basket, and coffee boiler in readiness for the picnic feast



IT IS unbelievable how the coming of summer changes our ideas as to what we want out of life. During the winter months those of us who are city dwellers are quite contented, pampered with steam heat and electric refrigeration. Then come a few warm days, and all in a moment our thoughts turn to the open fields and woods. Life in a tent, a meal cooked over an open fire, an invigorating swim in the ocean or in the icy waters of a lake—these are the joys we long for as eagerly as if all our modern improvements had proved complete failures.

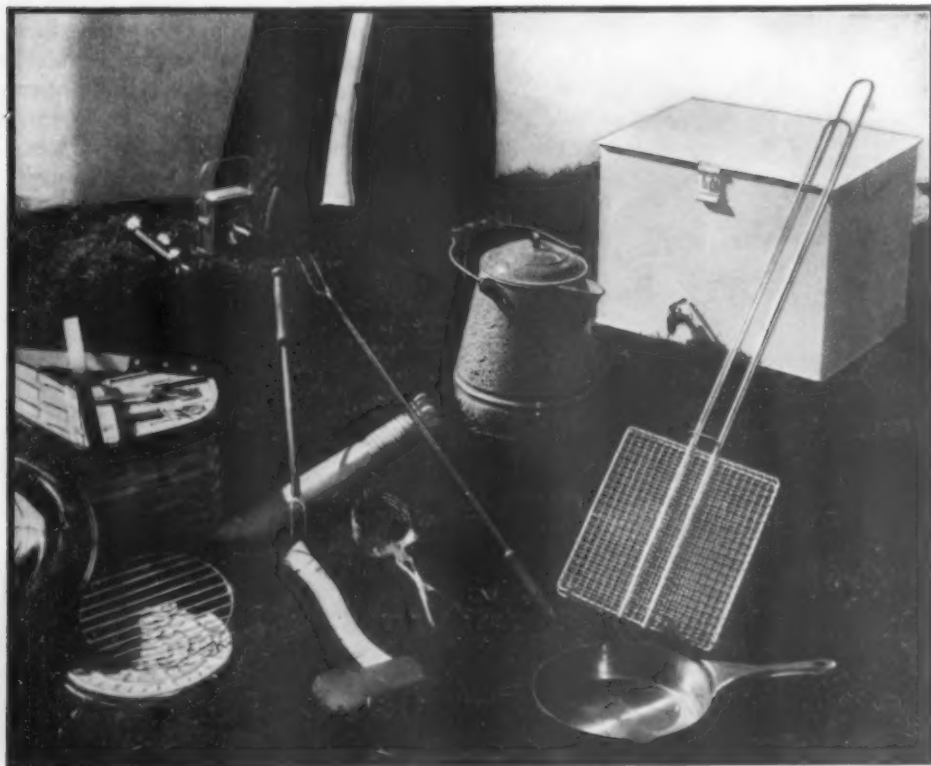
But we have been civilized for too many hundred years now to be able to return to nature without finding it something of a drastic change. We may long for the woods, but once away from the city, we shall miss its comforts unless we can to a certain extent take them with us. Therefore, we must pay careful attention to the choice of an outfit.

Of course, the first consideration in planning a trip is the roof over one's head. Experts in these matters tell us that many who go camping nowadays do it in a less rough and ready fashion than before. If leaving the city does not

mean going to a summer cottage, the destination is often a small "shack" which offers real protection from the weather and, if permanent, does away with the trouble of carrying a tent. A portable version of the shack is what is called the "close to nature house," a great favorite with those who rent a lot by some lovely lake, but who have to provide their own shelter. These houses are small, easily erected, portable cabins, with wood flooring, a wood and wire frame, canvas walls and roof, doors, and windows. The smallest size is 6 by 8 feet and costs \$33.50.

IF we feel that the portable cabin is too sophisticated for the woods we may choose the wall tent, also popular on motor trips with people who prefer to make their own overnight camps. A size which gives a space of 10 by 12 feet costs about \$20.00. But the newest tent is the umbrella style, supported by a center pole, which rolls into a convenient size for carrying and is simplicity itself to put up. The 9 by 11 foot size, suitable for two, costs \$32.00.

If the camper is a follower of the strenuous life and believes that hiking is the only sport, his shelter must be very light and compact for carrying—a need quite well filled by a pup tent, priced at \$3.95. He will also need an aluminum canteen in a khaki case, the lightest he can find. Not only for the walker, but on day-long canoe expeditions out from the main camp an individual cook kit in a khaki case is a great convenience. It includes a frying pan, cup, plate, covered pot for cooking soup or coffee, and a knife and spoon, all arranged to fit together into a small space. Canteen and cook kit cost \$2.95 each. Of course everyone who spends even a day in the woods should have the right knife, strong, reliable, and capable of acting as both tool kit and cutlery. The best obtainable happens to be (Continued on page 512)



A portable refrigerator, capacious coffee boiler, long handled broiler, food server, long handled forks, skillet, oven, hatchet, and other articles of interest to the camper are grouped here. (Photographs, courtesy R. H. Macy & Co.)



Sketches by Harry Cimino

Whatever types of materials one chooses for the construction of a house, low maintenance and upkeep costs will follow only if the better grades of products are used and superior craftsmanship employed

The house that needs no repairs

Practical suggestions for durable walls and roofs

TYLER STEWART ROGERS

THERE is no intention of being misleading in the title to this discussion of the house that needs no repairs. Of course, everyone will understand that houses need a certain amount of repairing every once in a while. One cannot build a home like the one-horse shay that served well throughout its allotted span of one hundred years and a day before it utterly collapsed. No, one must anticipate repairs and maintenance of a home, but if their cost and frequency can be reduced to a point where they are neither burdensome to the pocketbook nor troublesome to domestic order and happiness, a very great deal has been achieved by the home owner.

There is so much to be said on this subject that, for the present, the discussion must be confined to those two very important elements—the exterior walls and the roof. The next article in this series will touch upon eliminating maintenance and repair costs within the home.

Obviously, there are certain types of construction that are more durable and less likely to cause repair and maintenance expense than others, but usually the more durable materials are the more costly, and some of them may be wholly out of reach of the family seeking a modest home of its own. It would be of no point, therefore, merely to discuss that ideal of home construction—the house that would last forever without attention. Rather it is important to think in terms of the materials commonly used, whether wood, brick, stone, or stucco, and to seek practical methods of eliminating repairs of whatever material may be chosen. One rule can be laid down at once. The foundation upon

which the house rests must be rigid and amply strong to support the framework, with no possibility of future settlement or weakness. The most practical suggestion that can be made on this matter is to trust to the guidance of an experienced local builder or your architect. In some localities, the ground is so hard that a twelve-inch footing of cement or stone will be more than adequate to support the foundation walls and the superstructure. There are times when even this footing is unnecessary, but more often, where the soil is soft or sandy, wider footings are required. Your local builder will know, and the bank or mortgage company which may help you finance your home will have a competent inspector to help you make sure of the permanency of this all-important detail.

THE second rule is that the hidden framework of the house also must be strong and rigid. The cracking of stucco and interior plaster, the vibration of floors, and the gradual deterioration of all parts of a home may be attributed largely to insufficiently sturdy framework. It is not difficult to secure a sturdy, durable framework of wood. Every builder knows how to frame a house for strength and freedom from shrinkage or warping. The owner's problem is to insist upon the use of well-dried lumber and to require that the framework be designed and erected in accordance with recognized standards which have been established by the National Lumber Manufacturers' Association. It is only when the builder is forced to price-cutting methods to meet low-grade competition that he



may necessarily adopt framing methods and materials of inferior character and quality.

The very newest method of structural framing for homes is to employ steel. The modern steel frame house is the last word in strength, rigidity, and durability. It is specially designed to eliminate the hazards of plaster and stucco

cracks, and thus it must be considered in any discussion of the house that needs no repairs. Steel framing is entirely practical for the modest home, but to obtain its full advantages, it should be used with wall facings of brick, stone, or stucco, and it should have structural floors of concrete or gypsum. These factors, taken together, increase the total cost of the house from eight to ten per cent above the cost of similar homes built of wood.

The two precepts already established—firm foundation and rigid framing—apply with equal force to every house whatever may be the material chosen for its outer surfacing. If the outer walls are to be of wood, there are five points to watch with special care if subsequent maintenance expenses are to be minimized. First, the sheathing should be applied diagonally, unless the frame itself is well braced, and even then, it is advantageous because there are no horizontal cracks to interfere with the nailing of a row of shingles or clapboards. Secondly, the shingle or clapboard nails should be non-rusting. The life of an ordinary shingle nail, not galvanized, is from seven to twelve years. The life of good siding is forty years or more. With zinc-clad, pure zinc, or copper nails, the added cost will be from five to eight dollars for the whole house and the nails will last as long as the siding. Third, the shingles or clapboards should be of highest quality. The better shingles are cut with the edges of the grain showing and are usually of red cedar or cypress. Fourth, if shingles are employed, those pre-dipped in a preservative and color stain obviously have a longer life than untreated shingles, and they also minimize or eliminate periodic repainting. Fifth, if clapboards or painted shingles are used, insist upon a first-quality painting job at the start—not less than three good coats over the priming coat—and repaint again before the protective paint film has broken down. Waiting an extra year may add fifty per cent to your repair bills.

Masonry walls of brick, stone, or stucco eliminate repainting costs and, if correctly built, require no attention for many decades. It is scarcely necessary to touch upon solid masonry walls of brick or stone, or even walls of hollow tile and cement block with a facing of stucco or brick, beyond noting that the strength and weather-tightness of such walls depend upon thoroughly filled mortar joints. Where a wood or steel frame is employed and the exterior facing takes the form of a veneer of masonry,

close attention should be paid to its construction. Ordinary brick veneering which is separated from the sheathing by an air space of one inch or less and is bonded to the wall with metal ties, is a common method of construction. A newer method is to use over the sheathing a heavy welded wire fabric which has a backing of strong fibrous material



that acts as a dampproofing and insulating blanket. The brick or stonework is laid up an inch or so away from this fabric and the mortar used in the joints is slushed down in back of the masonry so that it flows around the wire fabric, pressing the backing material away from the wires a short distance. When this cement mortar hardens, the steel wires, which become embedded in the mortar, reinforce the entire masonry facing and the extra mortar adds weather-tightness.

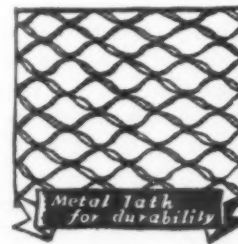
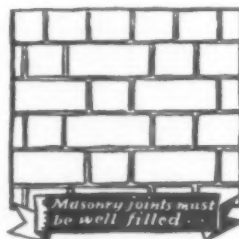
The secret of good stucco lies in the use of a strong reinforcing base and in making the stucco not less than five eighths of an inch thick and preferably a full three quarters of an inch. Metal lath is commonly used over the siding, or a welded wire mesh as mentioned above may be employed to reinforce the stucco work. All types of masonry walls, including stucco, are benefited if they are coated with a dampproofing liquid or paint, or if the cement mortar is mixed with a waterproofing compound.

The house that needs no repairs must have a permanently weather-tight roof. The type of roofing material to be used should be chosen before the structural framing is designed, because some of the popular types of slate and tile weigh a great deal more than wood or composition shingles and extra strength must be provided to support them firmly. It is common practice, where wood shingles are to be used, to nail the shingles to nailing strips laid across the rafters. In some sections of the country, this is considered wise on the theory that the shingles are better ventilated and will not rot if so laid. Nevertheless, in other sections, builders are accustomed to laying tight sheathing over the rafters, whether wood shingles, slate, tile, or any other type of

roofing is employed. Because of the superior insulating value of a tight wood sheathing, this type of construction may be recommended as the better of the two, especially for cold, dry climates.

The choice of wood shingles for roofing is governed by the same considerations as the choice of wood shingles for siding. They should be of edge-grain red cedar or cypress of first quality. Zinc-coated, pure zinc, or copper nails should invariably be employed. Shingles dipped in a preservative compound are considered to have an advantage over untreated shingles and they also offer the opportunity for introducing color without excessive added cost.

There are many types of manufactured roofings that may be chosen for their durability and freedom from subsequent maintenance expense. Among the asphalt types, preference must be given to those of double or extra-heavy weight, because they are sure to lie flat and they have the sturdiness to resist weather for many years. Asbestos cement shingles will form a lifetime roof, but here again, the better qualities and heavier grades will usually be worth their extra cost. The very thin shingles are often too brittle and may be broken by the wind, unless they are nailed with great care. Among the metal roofings, which include zinc and copper covered asphalt shingles, sheet copper, sheet zinc, and even aluminum, there is little to be said concerning the methods of application beyond the broad



statement that tightness of roofing depends upon workmanship rather than on materials, because these metals will survive exposure for almost indefinite periods. Slate, shingle tile, and the various forms of Spanish tiles are also inherently durable and again the permanency of the roof is more a matter of good craftsmanship and the use of non-corrodible nails than a matter of the life of the roofing itself.

But the roof surface alone is not going to assure a weather-tight covering for the home. Only soldered sheet metal roofs are actually water-tight. All of the others shed water down their sloping surfaces, and require other protection where snow or ice may collect and cause the melted water to finger its way upward beneath the shingles or tile until it penetrates the attic. Flashings of metal are used to prevent this seepage at the ridges, along the eaves, and in all valleys. Copper and zinc are the commonly used materials where durability and freedom from future replacement are demanded. Zinc should not be used with wood shingles because the latter contain a corrosive acid that gradually attacks zinc, but zinc may be used with all other types of roofing as a lower-cost alternate for the copper which is more commonly employed. The usual specifications call

for sixteen-ounce sheet copper with overlapping flashings (called counter flashings) around chimneys, dormers, or other vertical surfaces that protrude through the roof.

The last detail is the construction of gutters and leaders to carry off the rain water. The preferred materials are copper, zinc, and lead, the latter being somewhat more expensive than the others and, therefore, less appropriate to moderate cost homes. If wood gutters are called for in the design, they should be lined with one of these three metals, or heavily painted with a waterproof asphalt paint.

Such are the primary considerations in the development of the house that needs no repairs, at least so far as its exterior surfaces are concerned. It has not been possible to discuss many special materials that have long life and marked economy, nor has it been possible to touch upon minor details of construction which contribute to permanency. From this discussion, however, the reader may perceive that whatever types of materials he chooses for the construction of his home, low maintenance and upkeep costs follow upon the heels of his insistence that the builder use the better grades of products and employs them with superior craftsmanship.

In this chart of an imaginary house the artist has illustrated several points which are developed in the accompanying article. The essentials for durability in a house of wood frame construction include adequate footings under foundation walls, weather-tight roofing and a framework that is made of sound timbers securely braced. Durable gutters and leaders to carry off water protect the walls from eaves to foundations. Diagonal sheathing for walls and horizontal sheathing for roofs are good practise, but the latter may be omitted when wood shingles are used





H. Victor Keppler

DRESSING THE DRESSING TABLE

The lovely black and white bottles in the upper panel come from Mitteldorfer Straus, Importer, while the box of powder, the set of rainbow down puffs, the boxes, and the organdie container for cotton with the organdie rose are all from Lord & Taylor. In the second panel, the boxes are from Lord & Taylor, and the delightful toilet bottles and box with gayly colored hunting scenes are from R. H. Macy, as is the black

perfume tray and the bottle with the house lustre decoration. The third panel displays two unusual toilet sets—both are Du Pont Viscaloid. The lower panel holds some unusually smart bottles and boxes, all in black, black and silver, or black and crystal, with the exception of the white bottles and box which have attractive decorations in gold on milky glass. All these articles are from Lord & Taylor

A modern reproduction of a French poudreuse with stool in matching walnut. The mirror is on the inside of the lid of the middle section that covers the inner compartment in which the toilet articles and containers may be kept when not in use.
(Courtesy, Jane White Lonsdale)



Richard Averill Smith

Under the looking glass

Frills and furbelows that are truly feminine

ELIZABETH H. RUSSELL

A WOMAN will evolve some sort of dressing table wherever she may happen to be, no matter how limited the space. Even a camp will provide a rustic shelf where a fresh towel may be spread with the toilet articles which reveal a woman's presence. If the house which she is furnishing is simple and expenditures must be kept down, she may fashion her dressing table, for the time being, from the plain deal frame that a carpenter will make for a small price from a few boards, or from the simplest wooden table which she can find in a department store's unfinished furniture or kitchen department. This may be painted or stained at home, or left plain, as best suits her scheme. A few yards of chintz, dotted muslin, organdie, or plain sateen, with bolts of contrasting bindings or pleated frills, papers of tacks, and a hammer are all any woman who is even moderately skillful with her hands will need to make herself a dressing table of which no one need be ashamed.

If she has a little more money to spend she may buy one of the simple well-designed tables in some period style which come, either stained, painted, or unfinished, in Early American, Colonial, Queen Anne, French Provincial, or modernistic design. The work of staining or painting an unfinished model is not at all difficult, and may be done eas-

ily at home. Many shops now supply a table ready for home decoration which is semi-circular or kidney-shaped as to top, has several drawers, and swinging arms that open outward from the center. The draperies are attached to these arms, so when they are closed the table appears to be fully draped, and when they are open the person using it may have room for her knees, and easy access to the drawer space. This is a popular model and makes a beautiful table when finished. It is often draped in taffeta, with small frills or tiny ruffles used for a finish on the larger flounces, giving a luxurious effect, especially when the table is equipped with boudoir lamps with dainty shades that carry out, or contrast with, the color scheme. A piece of plate glass or mirror should be cut to cover the top, as a careless person using cosmetics may ruin a fabric left unprotected.

IF you prefer the elemental lines of modern design, you may purchase a dressing table in which the beautiful wood of which it is made and the great simplicity of construction will be its chief characteristics, while its only ornamentation will be borders of contrasting woods, and decorative knobs in black or silver. A decorative mirror, framed in metal or black, is usually (Continued on page 320)



With its open framework covering and its background of trees and shrubbery, this long wooden bench constitutes an interesting garden feature

Here a swing seat invites one to restful contemplation of a charming garden vista of lawn, flowers, and shrubbery

Garden furnishings

Selected for charm and comfort

CHARLES ALMA BYERS

This set of garden furniture consisting of chairs, table, and umbrella in deep orange, lavender, and tan lends a colorful effect to its surroundings



SEATS that invite one to sit and rest, and to admire leisurely some pleasing vista, make of a garden a place of genuine enjoyment. They help to bring one out into the wholesome, healthful air of the open, there to find relaxation and recreation amid the flowers and foliage, and to realize to the fullest the joy and pleasure that come from garden ownership.

Seats, properly placed, are also improving to the general appearance of a garden. They help to give it definiteness of form and character and a hospitable atmosphere. Especially are they to be appreciated and admired as a means of bringing to the grounds points of outstanding interest, often, perhaps, lending to some particular spot just the touch needed to keep it from being commonplace. Then, too, a seat frequently invites something in the way of special planting, a special setting, which will further enhance the charm of the landscape scheme.

In some cases the matter of locating a garden seat will afford but little choice; in others, however, it will provide many, and exceptionally interesting, possibilities. Naturally, the preferred location, from the standpoint of practical usage, is one that furnishes more or less protection from the sun and undue breeziness, yet a seat in the full sunlight, both for occasional use and for decorative purposes, is often to be desired. Seats given the shelter or semi-shelter of a summer house, a vine-draped pergola, the spreading branches of a tree, or mere lattice-work are always a source of particular enjoyment. On the other hand, a seat that has only a garden wall or fence or a clump of shrubbery as a close-up background also makes an admirable feature. Again, perhaps, a single seat placed before a fountain, beside a pool, or even out upon the open lawn is often delightfully effective.

In the placing of garden seats, one should also give consideration to the matter of outlook, the views they will command of the grounds. Naturally, when at all feasible to have it so, the outlook should be pleasing, intriguing, and pictorially attractive.

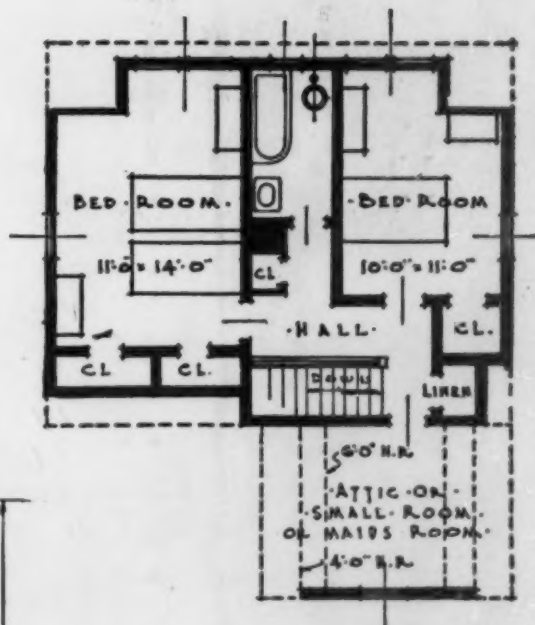
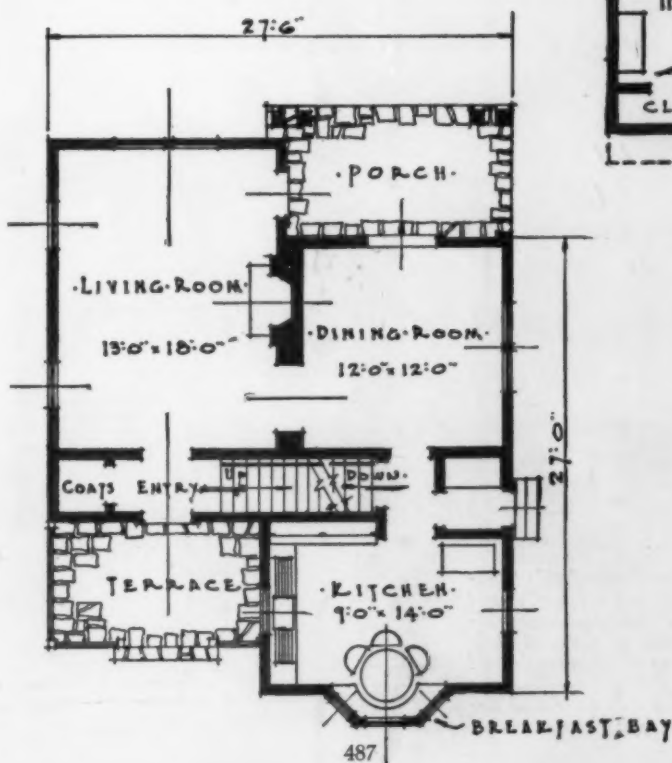
Garden seats are to be had in many different kinds of style and construction. Some, all ready (Continued on page 515)



A ROOMY SMALL HOUSE FOR LESS THAN \$9,000

The Architects' Small House Service Bureau, who designed this house for THE AMERICAN HOME, estimates the cubical contents at about 15,500 cubic feet. In those regions, such as the New York area, where this type of construction costs approximately 55 cents a cubic foot, such a house would cost \$8,525. The broad gambrel roofs provide extra room on the second floor, and the cost of building second story walls is greatly reduced.

This house has been planned for frame construction throughout, with wide exposure shingles or clapboards on the exterior walls. The roof, of course, is the ordinary shingle type, stained or left to weather. The house is only 27 feet wide and not much more than that in length. It would fit comfortably on a 50-foot lot, and the terrace and porch, which have been skillfully fitted into the plan of the house, would be attractive features of the landscaping of the grounds.



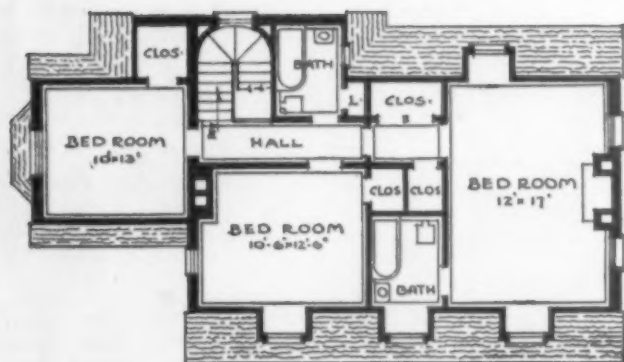
The first floor plan, at left, shows the kitchen situated in the front of the house, leaving the whole garden vista at the rear open to the living room windows. At the same time, an attractive appearance has been given the front of the house by planning a breakfast bay for the kitchen. The dining room and living room are well designed and placed. Each room has two exposures. The second floor has two bedrooms and a bath, with an unfinished space over the kitchen which may be used for storage, a sewing room, or a maid's room.

The house below was designed for us by Jonas Pendlebury, and while it is soundly based on tradition, it represents no one style of architecture. Mr. Pendlebury suggests common brick walls, painted white, and white or ivory white for the casement doors, dormers, and window sash. The roof should be of dark blue slate

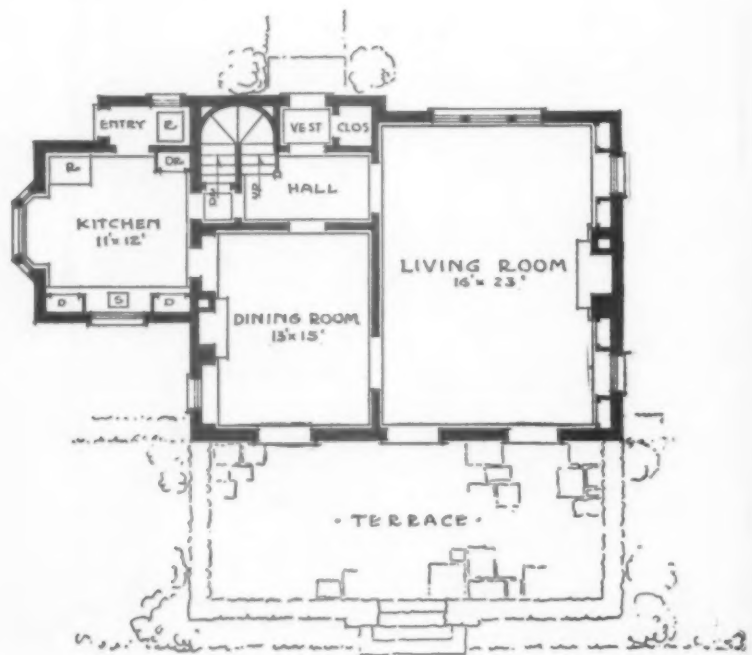


A TWENTIETH CENTURY AMERICAN HOUSE

Pictured from the garden side



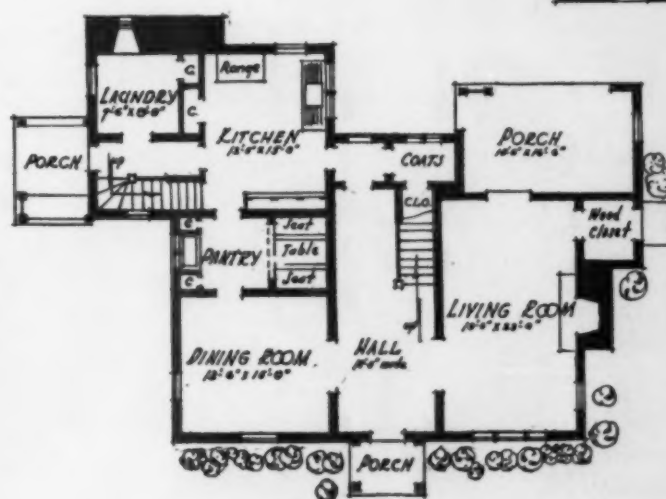
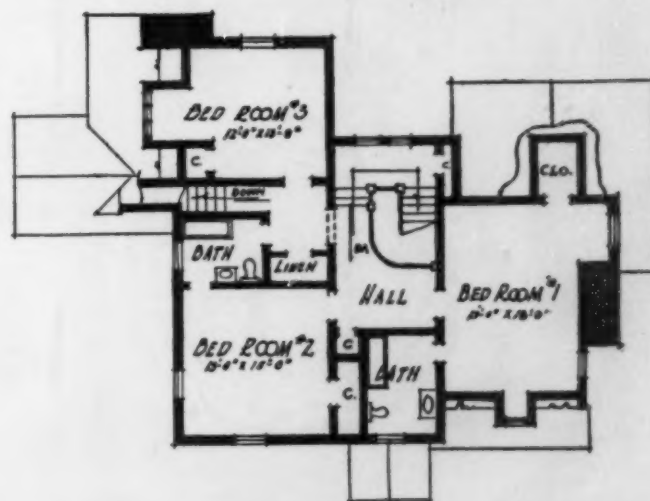
The architect estimates the cubical contents of this house at 24,620 cubic feet which, at 60 cents a cubic foot, would make the house cost \$14,772 to build. The first floor plan and some of the garden plan is shown at right. A stair hall divides the entrance vestibule from the living room and dining room. Both of these rooms face the garden. The second floor plan, above, shows three bedrooms and two baths and a large fireplace in the master's bedroom.





BASED ON PLAN RATHER THAN PRECEDENT

An unusual small house design



Logically developed from the plan requirements is this attractive house designed for THE AMERICAN HOME by Carl A. Ziegler, a well-known architect of Philadelphia. Working "from the inside out," Mr. Ziegler has not only evolved a very satisfactory plan but he has skillfully developed an interesting exterior for this small house. It is, of course, designed for frame construction with concrete block foundations and a cellar under the kitchen and laundry only. Mr. Ziegler suggests 1" x 10" clapboards for the exterior walls, unstained shingles for the roof, and common brick with $\frac{1}{2}$ " raked joints for the chimney. The exterior woodwork should be painted an ivory white. The porch floor and paths are flagstones

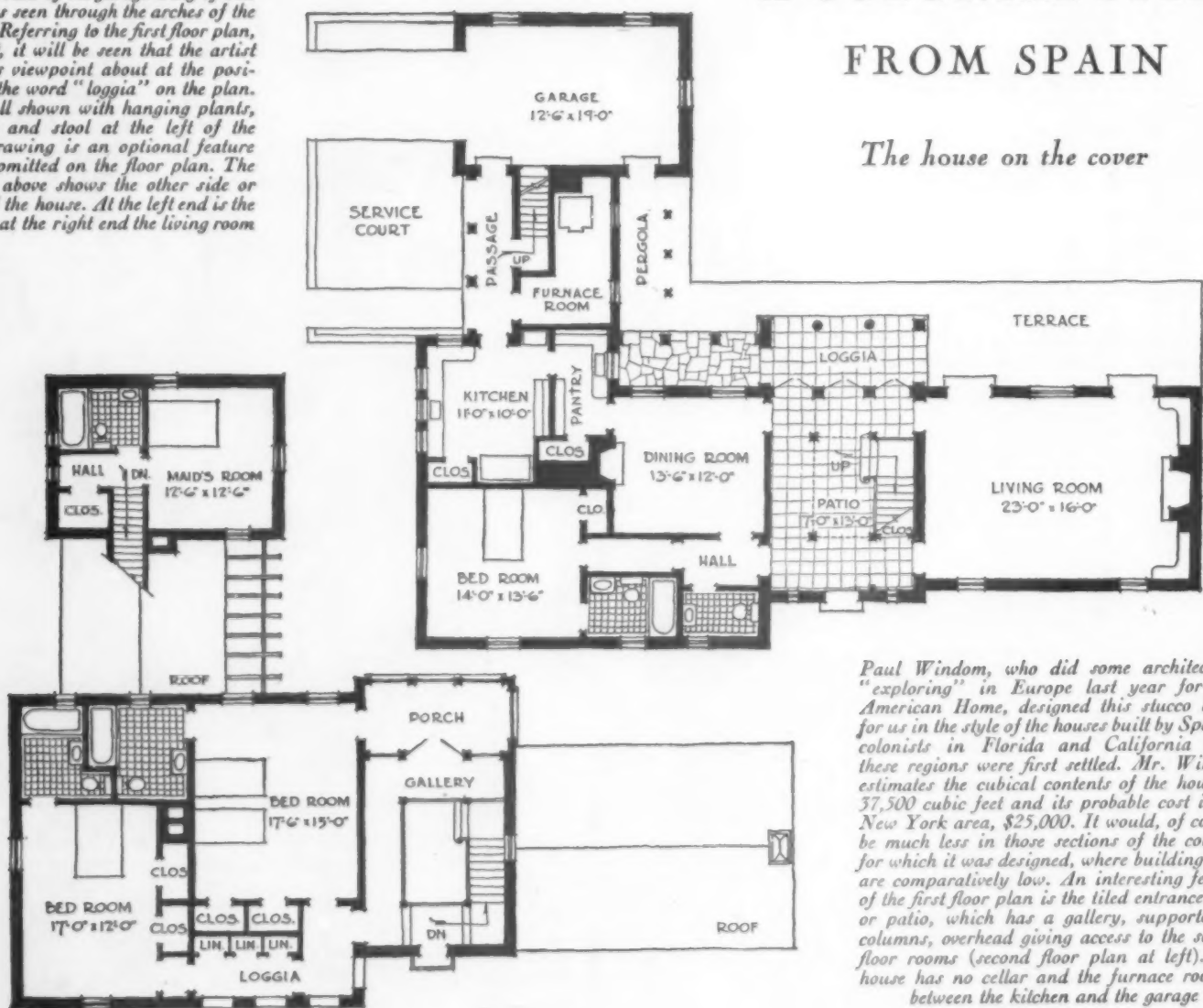
Mr. Ziegler estimates the cubical contents of this house at 31,500 cubic feet. In regions where this type of construction costs 55 cents a cubic foot, the house would cost, therefore, \$17,325 to build. The first floor plans, at left, illustrate how the house has just grown around the plans. The back porch connects directly with the laundry, the back stairs, and the kitchen. The living room, across the broad hall, has a big fireplace and a wood closet with a door leading outside, a feature of Pennsylvania houses



The cover of this issue of the magazine shows a view of the garage wing of this house as seen through the arches of the loggia. Referring to the first floor plan, at right, it will be seen that the artist took his viewpoint about at the position of the word "loggia" on the plan. The wall shown with hanging plants, a table and stool at the left of the cover drawing is an optional feature and is omitted on the floor plan. The picture above shows the other side or front of the house. At the left end is the garage, at the right end the living room

A COLONIAL STYLE FROM SPAIN

The house on the cover



Paul Windom, who did some architectural "exploring" in Europe last year for The American Home, designed this stucco house for us in the style of the houses built by Spanish colonists in Florida and California when these regions were first settled. Mr. Windom estimates the cubical contents of the house at 37,500 cubic feet and its probable cost in the New York area, \$25,000. It would, of course, be much less in those sections of the country for which it was designed, where building costs are comparatively low. An interesting feature of the first floor plan is the tiled entrance hall, or patio, which has a gallery, supported by columns, overhead giving access to the second floor rooms (second floor plan at left). The house has no cellar and the furnace room is between the kitchen and the garage

Precedents for the American home

The last in our series describes the Spanish Colonial house

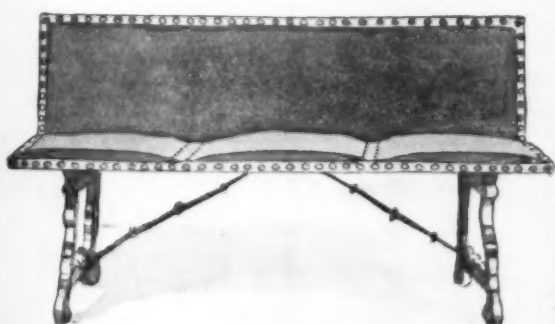
LURELLE VAN ARSDALE GUILD

WE ARE too much inclined to think of the early architecture of the American Colonies in terms of the New England "salt-box" and Southern tall-columned houses forgetting in the meanwhile that our earliest settlements in the country were made by the Spanish in Florida and California and the houses of these settlers naturally followed the trends of their native country.

In all the semi-tropical parts of America we find the Spanish style preserved to the present day, largely because it is appropriate to the climatic conditions and affords a maximum of air and sun and a setting for a more or less outdoor life. We associate with the architecture of the Spanish Colonial houses all the glamour and romance of old Spain—vine-clad balconies, deep-shadowed arcades, and open patios filled with gayly colored pottery and vegetation, and small secretive windows with beautiful grilling.

In general, the type of this house is quite uniform in conception although greatly varied in plan—a flat or moderately sloping roof, small windows few in number, and a spreading floor plan which centers its life about the patio or open court. This court was often the living room of these homes, and practically all of the first floor rooms had direct access to it. In many cases the second floor sleeping rooms were also connected directly to the patio by low outside flights of stairs.

Ornamentation of the Spanish

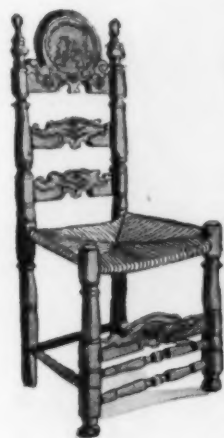


A stout monastery bench is covered with leather on seat and back, and finished at the edges with large brass-headed nails

Chests of all sizes were the most indispensable articles of household furniture in Spain, and are still popular in the provinces



Tables with lyre-shaped trestle supports, and connecting wrought iron braces were typical of the furniture of Spain



The baroque chairs of Spain in the seventeenth and eighteenth centuries had painted and gilded splats in their ladder backs, and rush seats



A wrought iron wall lantern, picked out in gold, is an excellent example of the craftsmanship of the country



A typical Spanish table of early date, made of walnut, with turned legs, an elaborately carved apron, and a draw top

house was largely a matter of color, a discreet use of overdoor panels and carved doors and the ever present and admirable wrought iron work of window grilles, stair railings, and door grillings.

Color appears in startling and unexpected places—a gayly colored tile set here or there in the plaster or stucco, tile stair treads, floors, or

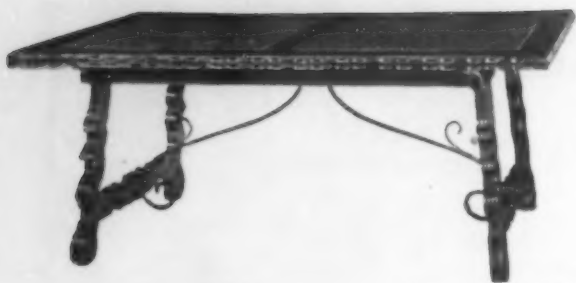
window sills. On the simple and often bare exterior walls we find the monotony of large, unbroken surfaces of plaster relieved by a rough texture delicately tinted.

Wood carving was used more on furniture than on structural parts of the house aside from doors which were rarely plain. Yet, it is not uncommon to find in the arcades beautifully wrought capitals and often decorative columns.

The iron work of the Spanish people will always be significant of their nation. In use on practically every home from the simplest to the most ornate it is a dominant feature of their architecture and notably beautiful in craftsmanship and conception.

Certain pieces of furniture seem distinctly Spanish in character. Invariably these pieces employ iron in some form, either as braces or decorative stretchers and in some instances throughout the entire piece. Polychrome ornament and tile, too, were used effectively on tables, chests, and chairs.

The true Spanish house was sparsely furnished and for this reason it is not surprising to find that what furniture was used was often massive in scale. Huge cupboards and wardrobes as well as chests of all shapes and sizes appear



A copy of a Spanish draw table the top of which may be extended to seat an additional number of guests. (Kittlinger Furniture Company)



A unique seven-branch candlestick is a beautiful example of delicate wrought iron work done by modern craftsmen. (Carbone, Inc.)



Modern copies of Spanish pottery reproduce the original designs perfectly in both coloring and graceful outline. (Stern Brothers)

A typical chair of Spanish origin, with carved crest and splats, and turned legs and spindles. (Kittlinger Furniture Company)



English examples of eighteenth-century Spanish armchairs showed the high backs, shaped flaring arms, carving, and rich brocades. (Kittlinger Furniture Company)

everywhere in the Spanish home. The massiveness of these larger pieces was relieved greatly by the ornateness of their carving or polychrome painting. Tables are large and usually have decorative wrought iron stretchers and often carved legs and aprons. Smaller tables follow the same pattern as the larger ones and often have tops made of tiles or even marble. Dining tables are refectory in style and occasionally have tile set upon the entire top forming either a complete unit of design or retaining an individual pattern to each tile.

Spanish chairs are severe in appearance, in most instances being somewhat square with flexible leather seats and spindle backs or solid, carved cross-splats. Leather is occasionally replaced with velvet. The Savonarola chair, so common in Italy, is equally popular in Spain and appears in both wood and wrought iron with brass finials. Velvet cushions are used on the seats and often held in place with ornate tasseled cords.

The "vargueños," chests raised on legs and equipped with a desk interior of many small compartments, are found in every true Spanish home. Often lacquered or polychromed and bearing the most ornate locks and hinges, they are the show pieces of the home. The interiors are equally as ornate as the doors. Legs are elaborately carved and braced with decorative stretchers.

Beds are varied in style but ornate in their carving, and often have head and footboards set with innumerable well-turned spindles. Some head and footboards are upholstered with richly colored velvets and damasks or painted in scenic

manner. Contrary to what we might imagine, the tall four-post bed is not uncommon in Spanish homes. The beds in this case are ornate and heavy and depend greatly for their charm on the exquisite draperies and covers. A few headboards are made separate from the beds and hung upon the walls behind them. Floor lamps, table lamps, lanterns, and fireplace equipment are of wrought iron or brass and vary greatly in pattern, preserving, however, that facility of design which caused the Spaniard to excel in the working of this metal.

Brocatelles, damasks, and often tapestries grace the otherwise plain walls of the Spanish home and relieve what in the absence of curtains (which are rarely used) would be the bareness of the whole effect.

In decorating the American home of Spanish design, there are certain details which should be closely studied. Tiles may be generously used, and in practically every room of the house, either as decorations in baked clay floors, as complete dados, or as door trim. The Moorish carved plaster frieze is another feature which would intensify the style. A curious fact about these friezes in the true Spanish houses is that in Moorish houses they were always highly colored while in Christian houses they were white like the walls.

Matting may be used for the floors but the delightful rugs of Alcaraz and Cuenca, or even the modern Alpujaras, are far lovelier. Occasional small rugs in front of easy chairs are characteristic. The Spanish flavor is retained by using only old iron or brass fixtures. Occasionally one can pick up a fine old brass lamp made for oil and this can be mounted as a very satisfactory electric lamp.

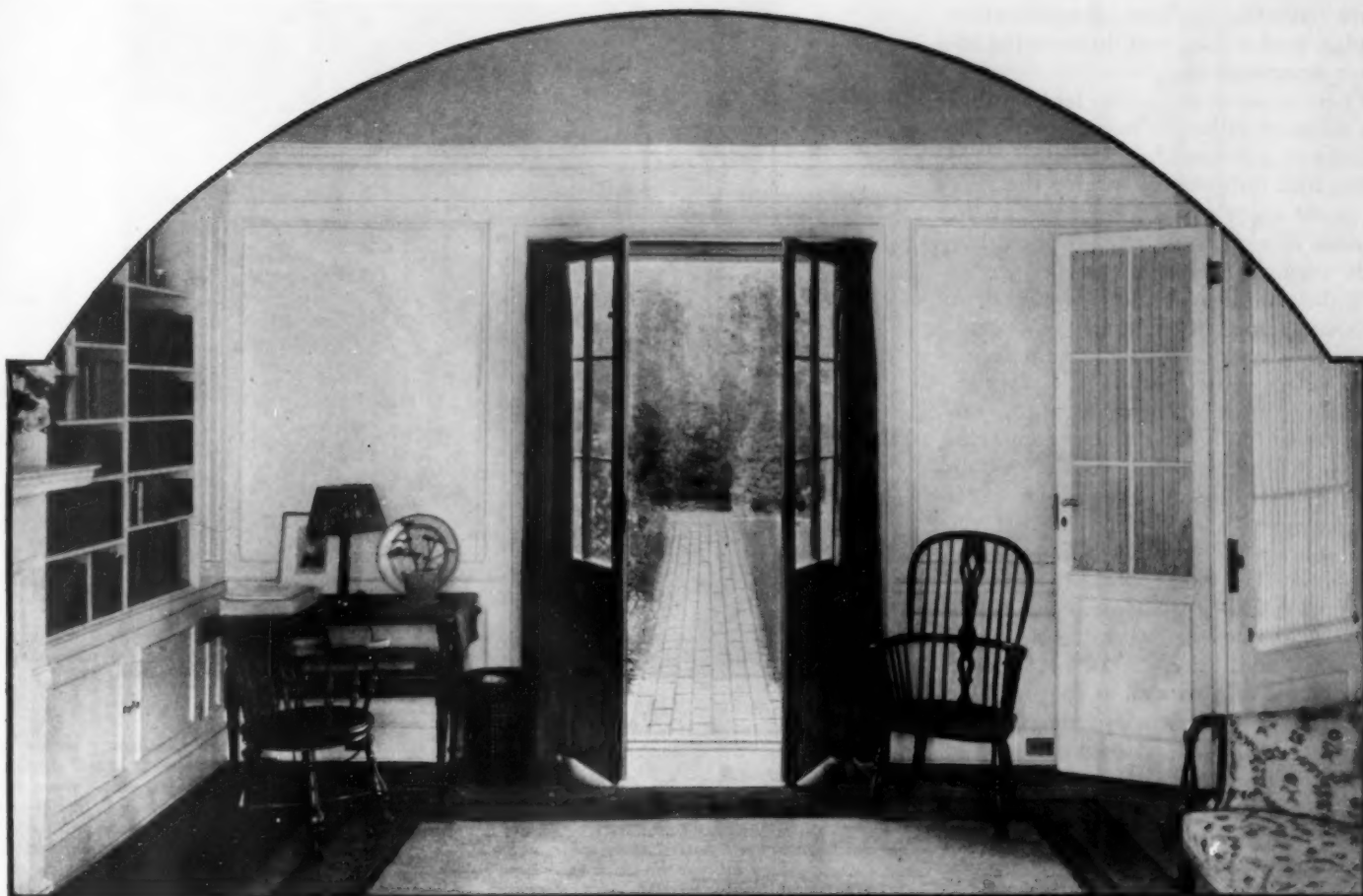


A pair of modern altar candlesticks in brass are perfect copies of ancient originals. Cherubs' faces adorn the tripod bases which stand on claw and ball feet. (Stern Brothers)



A plant holder has been developed in wrought iron from an old Spanish prototype. (Carbone, Inc.)

This modern carved walnut chest reproduces the dignity of Spanish Renaissance furniture. (Kittlinger Furniture Company)



The simplicity of the wood trim, the light tone of the walls, the furniture in perfect scale, and the intimate view of the garden through the wide open doorway all contribute a feeling of spaciousness to this room

Making the small house seem large

Spaciousness is the reward of careful planning

HAROLD DONALDSON EBERLEIN

WE CANNOT make the inside of a small house even a fraction of an inch larger than the space contained within its outside walls. There are the insurmountable obstacles of bricks or timber, and there are the immutable dimensions that refuse to be stretched. Though we cannot escape the limitations of previously fixed length, breadth, and height, nor expand the actual inside area, we can exercise a certain wizardry and make that area *seem* much larger than it really is. If we manage rightly, we can give the small interior an aspect of spaciousness that will be not only an enduring and genuine comfort to the occupants of the house, but also an inviting quality to

all who come within it. The air of spaciousness, indeed, becomes an air of graciousness as well.

The elements that enter into this beneficent magic are four in number: (1) the manner in which we arrange the divisions; (2) allowance of proper space for the stair; (3) our method of accommodating scale; and (4) the way in which we treat the furnishings. If we adjust and combine all these factors wisely, we shall attain the maximum of spaciousness and the small house will not have an oppressive, smothering atmosphere, but rather a sense of amplitude out of all ratio to its real size.

If we cut up the small interior with needless partitions and divisions, we merely accentuate the fact of limited

space without gaining any substantial advantage in return. We create complexity, and even confusion, where simplicity is of the utmost importance. It is a mistake to imagine that the small interior can be stretched farther by cutting it up into small pieces. By eliminating every partition not absolutely essential, all the waste space that unavoidably accompanies multiple divisions is saved and every inch of area becomes effective. On the ground floor, the kitchen and pantry must necessarily be divided from the rest of the establishment, and it is desirable to have a separate study where one can work or write without interruption, but the living room and dining room together might well occupy one generous

space without partition. Simplification of plan goes a long way in securing interior spaciousness.

There is no single inside feature that can do more either to make or mar the interior of a house than the stair. It is of the first importance to give the stair adequate space even, if need be, at the expense of something else. It should be wide enough to present an aspect of generous amplitude, and it should have an easy, comfortable angle of ascent, whether it rises directly from the living room or in a separate stair hall. A mean-looking, hugger-muggered stair, uncomfortable to behold and uncomfortable to ascend, will effectually put an end to any hoped-for atmosphere of spaciousness in a small house. If the available actual space is insufficient to accord becoming breadth and an easy angle, and if the stair has perforce to be treated more or less as a sort of necessary evil, then it is better and more charitable, as well as to your own interest, to conceal its unavoidable shortcomings. Have it enclosed within walls and, preferably, shut off by a door at the bottom. Then its unfortunate nature will not spoil your attempt to gain an appearance of interior spaciousness. The treatment of the stair, above all in a small house, is not a matter in which you can (Continued on page 514)



Certain architectural features play an important part in influencing the apparent size of a room. The large window above made up of small panes of glass suggests definitely a sense of unhampered freedom. Photographs on this page by Mattie Edwards Hewitt

To make the small house seem large one must avoid heavy or massive scale in either the fixed decoration or movable furnishings. In arranging the furniture place the larger pieces first; the other things will group themselves according to associated usage





This house built by Mr. and Mrs. H. Carl Dann at Mount Plymouth, Florida, is of pine logs and stone such as the pioneers built sixty years ago. The split rail fence enclosing the attractively landscaped grounds was brought from a backwoods farm twenty miles away

The lure of the log cabin

A practical and economical type of construction

GEORGE H. DACY

THOSE of us who love to get close to Mother Nature feel that we are most nearly achieving our ideal when we live and sleep in a log cabin. Vacation days, spent in this type of dwelling, seem utterly removed from our workaday life. Even in the vicinity of New York City one finds log cabins used as week-end retreats, and in the figurative shadow of Capitol Hill, in Washington, there are three log cabins that have been constructed as permanent residences. Away from the cities log cabins are, of course, much more common and more popular. Among the illustrations of this article will be found photographs of cabins in such widely separated regions as Florida and Minnesota.

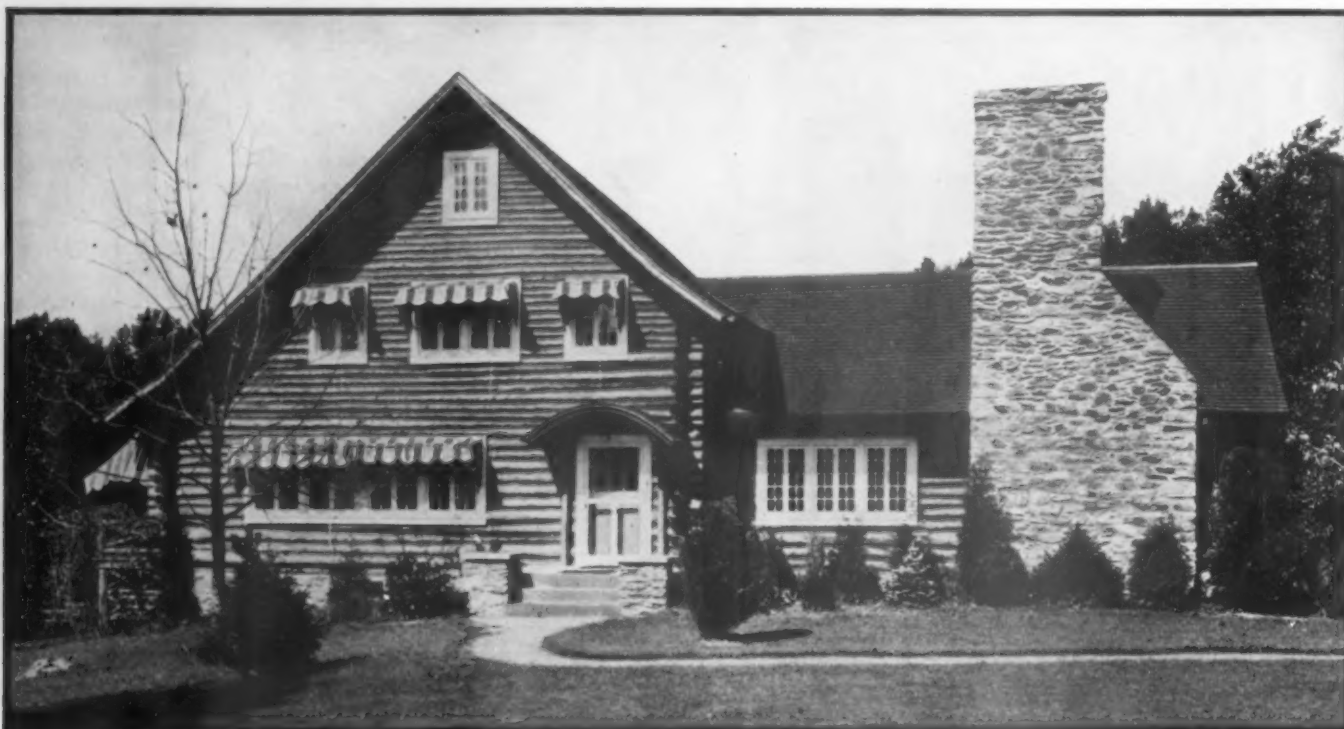
The interesting point about the cabin built in Minnesota is that it is constructed not of logs but of a log siding which is readily purchasable. The siding is made of pine, and is used for both exteriors and interiors. As you will see in the photograph of the interior of the cabin (page 496), it is in the shape of half logs. Each strip of siding constitutes a half log, and each strip is about one and a half inches through at its thickest point. The strips have overlapping joints and vary in width from about five inches to seven inches. The siding is stripped of bark, and may be treated with paint or stain in any way that is desired. It is possible, too, to simulate a mortar joint between the logs by the use of a mixture of white paint and sand.

The houses built in Washington prove how popular the

log cabin type of construction has become. These were not planned as play houses but are actual dwelling places. Three of them were built not far from the White House, and one is a ten-room residence on a commanding site, surrounded by four well-wooded acres.

This house was designed and built by Dr. S. S. Jaffee, who had spent many vacations in the fragrant timberlands of Maine and Canada. The forty-foot cedar logs used in its construction were brought from Canada, and cost only \$2.50 apiece. Two minimum carloads provided enough timber to construct the ten-room house and a five-room bungalow to be used for servants' quarters.

GENERALLY, spruce, fir, hemlock, tamarack, balsam, and pine are adaptable for the construction of a log cabin. The leading hardwoods also may be used, but they are so heavy that tedious and costly labor is required to handle them. The logs should have little or no taper, and should be about two feet longer than desired to allow for the lockjoints. Rough bark improves the appearance of the logs but is more subject to insects and borers, and if it is to be left on, the trees should be felled during the winter when the sap is down. Care must be exercised in handling the logs in such cases to prevent bruising the bark. Bark can be removed easily when the sap is rising in the spring by girdling the trees at four-foot intervals and



Not far from Capitol Hill in Washington stands this ten-room log house designed and built by Dr. S. S. Jaffee. Cedar logs were brought from Canada for the construction of the house

peeling off the bark with an ax blade or similar sharp tool. This bark, when dried without curling, can be employed for interior veneer, paneling, or other decorative details.

Some cabin-builders plaster the chinks between the logs on the exterior and fasten ordinary quarter-round strips in the crevices between the logs within the cabin or house. Where the quarter-round is dyed the same color as the logs, the effect of this interior treatment is pleasing. Where smooth inside walls are desired, it is advisable to hew the logs to a perpendicular plane with a broadaxe as the work progresses. Such smooth surfaces can then be lathed and plastered.

The strongest and best logs are used for sills and first tiers. The sill log should have its upper surface hewn flat so that the narrowest portion is two to four inches wide. The other logs should be hewn flat at top and bottom so that they will fit close together in adjacent tiers. In laying up the wall, the butts and tops should alternate so that a level wall will result with plumb corners. Where the ends are not locked, at every nine feet in the length of the wall the upper log should be tree-nailed to the lower tiers by boring a one and a half inch hole through it and through one

half of the thickness of the log below and driving a hardwood pin into place as a strengthening peg.

Several styles of log cabin walls and roofs are illustrated at the end of the article. In each case, the log to be hewed is placed upon the wall in position and fitted to the log below. If the round notch is used, the curve of the lower log is scribed on the upper one to serve as a guide in cutting the notch.

No particular calculations are made for openings unless to place a poor part of the log where it will eventually be cut out. When the top of the windows (Continued on page 522)



Log siding was used on the interior of this house located in the Minnesota River Valley near Minneapolis. W. H. Tusler is the owner and architect. (Photograph by courtesy of Shevlin, Carpenter & Clarke Co.)

The part that details play in decoration

PIERRE DUTEL

IN THE July issue I described two apartments which I had the pleasure of decorating for *THE AMERICAN HOME* in an attempt to show the magazine's readers how furniture of traditional lines could be used successfully with modern decorations and furnishings. In that article I described the rooms as a whole, lack of space preventing my discussing many of the interesting details that were worked out. Consequently in this supplementary article I shall describe some of the interesting problems—problems that anyone might well encounter in furnishing a home—that I met and how I overcame them.

In the apartments the floors, which are the primary decorative background, were covered with a dark tobacco-brown cork tiling which was specified by the architects for the entire building. The wall treatment therefore, was the

The problem of treating the casement windows with radiator below and long French window to the left was solved by framing all three elements as one group. Creamy, sheer taffeta was used against the glass, and rayon shiki in stripes of light and dark green, and soft blue was draped in classic folds above it



Photographs by Richard Averill Smith



The accessories in the pent house apartment were decidedly masculine as shown by the pottery farm horse and the radio in a modern cabinet. The draperies of creamy rayon crash with bindings and valances of tobacco-brown rayon satin, and under-curtains of figured rayon rep were well suited to a man's room

first thing to decide upon. In the living room of the two-room apartment the slightly rough plaster walls and the ceiling were painted an apple green, with a trim of soft, antique blue which contrasted beautifully with it. The bedroom walls in this apartment were painted a delicate peach color, while the ceiling and trim were pale robin's egg blue. The pent house apartment, which was assumed to be for a bachelor, had painted walls and ceiling of salmon-

cream tint, with a trim of coral-red, and the bathroom was done in vivid red with a green tiled floor. The trim was black with a border of black tiles around both baseboard and tub.

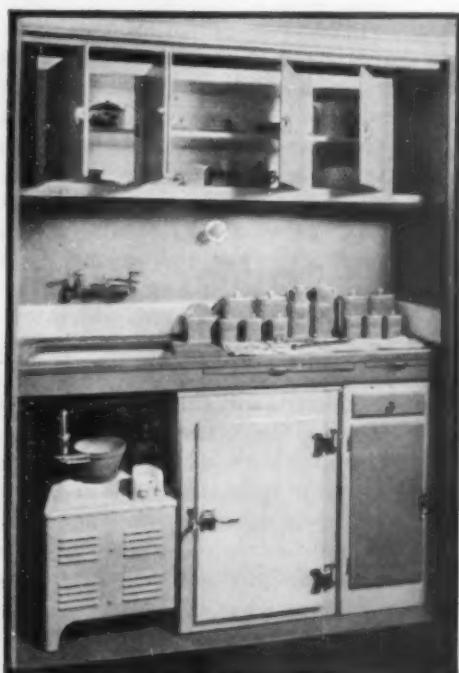
The bathroom in the two-room apartment was in peach and blue, and the small lavatory in ultramarine and black.

In the draperies in all the rooms I tried to impart a pleasing, gay but dignified note, and a study of the photographs will be worth while to any woman who is struggling with problems of her own. The materials used were all rayon fabrics, with the exception of a few chintzes for valances and chair coverings. The rayon products come in a wide range of textures and colors this year, and provide fascinating combinations for interior decoration. The picture above shows a particularly interesting treatment as the architectural features of this side of the room were somewhat complex, and an amateur might be puzzled to know how to handle them successfully. Here, in a relatively small space, were a casement window with a radiator beneath it, and, to the left, a French window leading on to a little outside balcony, raised a step from the floor. You



The desk was placed at right angles to a window thus providing good light, and was equipped with accessories of pewter. The French provincial dresser

holds the gaily decorated cream pottery dishes and odd pieces of pewter for serving an informal meal either in the pent house or on the terrace outside



The serving pantry adjoining the pent house living room was compactly arranged with cupboard, sink, and electric refrigerator all within reach. The food containers and the enamel utensils were all brilliant vermilion



The red walls, the green tiled floor, the black tiled border and black mirror frame, and the gold colored shower curtain gave an unusually striking color effect in the bathroom

may see in the photograph how simply and uniquely the draperies are planned to frame all these elements as one group, which seemed the most interesting solution.

The French window had long glass curtains made of sheer rayon taffeta in pale yellow, over which were hung heavier draperies of rayon shiki in broad horizontal stripes of light and dark green, and soft blue. The pale yellow glass curtain material was also used for the short casement curtains, and over the entire group was a large shaped curtain of the shiki, covering the top, and drawn to the right hand side of the window in heavy, almost architectural folds. This fabric was made with pinch pleats at the top, and rings sewed back of each pleat ran on a brass rod extended the length of the window. More rings were sewed at an angle running up to the upper right hand corner on the backs of the folds, with a silk cord run through and tied tightly, holding the folds firmly in place.

Thus the view of the landscape was beautifully framed, first in the soft breadths of creamy sheer taffeta, and then in the classic folds of the richer material.

This apartment showed how very successfully bold (Continued on page 521)

The business of buying an oil burner

Understanding the different types simplifies selection

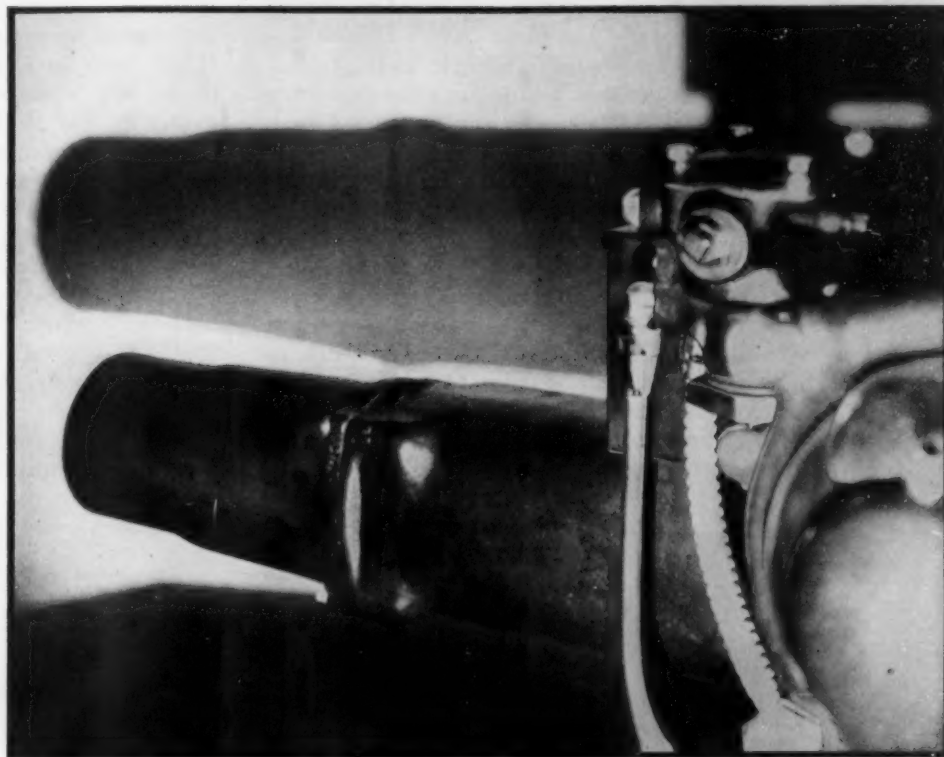
JOSEF W. VON STEIN

THERE is one thing in particular to remember in choosing an oil burner. There are different kinds of oil, but not all burners use the same kind. It is of prime importance to determine from the local oil dealer what oils are readily available in his vicinity. This factor will help to narrow down the list of devices to those appropriate for use with the fuel available. Oils are graded according to their viscosity, flash-point, and other characteristics and are numbered. Numbers 1, 2, and 3 are used for the domestic oil burner oils—number 1 oil being a light volatile fuel, number 2 a medium grade, and number 3 a heavy domestic oil. Burners which can utilize the heavier fuel may effect a considerable saving. Prices may range from five to seven cents a gallon for the heavier grade to seven to ten cents or more for the lighter oils. The cheaper, heavy oil contains about five per cent more heat value than the more expensive, lighter ones. Light-oil burners can burn only light oil and therefore can be used only where it is available. Oil burners for heavy oil, on the other hand, will also burn light oil, giving this type of burner a wider field.

The prices of oil burners vary greatly and usually the best ones are the most expensive. However, it is safe to say that the careful installation of a burner has as much to do with the satisfactory results as its design. It may be advisable to determine the reputation and capability of the local service man by talks with some of the other oil burner owners in your neighborhood.

In the majority of cases an oil burner is installed in a furnace originally designed for coal or some other fuel and the entire heating system should be looked over before any change is made. If symptoms of a sick heating system are apparent—if one room is underheated or there is an odor of coal gas—do not expect an oil burner to perform miracles. Oil heat is not a cure-all. Most oil burner dealers have heating engineers on their staffs to make surveys of heating plants before a burner is installed.

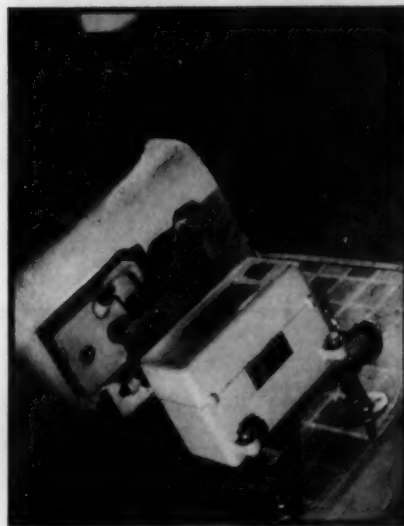
A determining factor in choosing the right burner must be the matter of capacity. Some manufacturers make but one burner and depend upon adjustments to accommodate various heating requirements. Others make a few types of burners, each of which can be so adjusted as to fit an



Photographs by Robert June

Even the most utilitarian pieces of household equipment have their dramatic aspects. The photographer realized this when making the picture, above, of an efficient "gun" type of oil burner which utilizes a mixing chamber to atomize the oil with compressed air before shooting it through the "gun" into the boiler

No matter how you look at it, an oil burner is a beautiful piece of mechanism, not difficult to understand if you know the methods of operation. The burner shown at the right has a device like a perfume atomizer to break the oil up into a mist before igniting it in the boiler



exact heat range. Still others manufacture a series of similarly constructed models of different sizes and oil-burning capacities. The quantity of oil which must be burned can be determined approximately from the square footage of radiation installed. We may assume a maximum requirement of about one fifth gallon per hour for each 100 square feet of direct hot-water radiation, and about one third gallon per hour for each 100 square feet of direct steam radiation. These figures are approximately maximum demands and should not be used for attempting to compute the seasonal fuel consumption.

Oil burners divide sharply into two classes of widely separated price: (1) the inexpensive "natural-draft" or "atmospheric" burner, depending upon the chimney's draft to produce air for combustion, the oil being prepared for combustion by vaporization; (2) the more expensive and highly developed "mechanical-draft" burner

which supplies its own air for combustion and atomizes the oil mechanically.

The first type consists often of merely one or two rough castings which are set inside the furnace. When the oil is turned on by a handle, it flows up through the central pipe and spreads over a preheated "hot plate" where it is vaporized, and air for combustion is supplied by the natural draft of the chimney. Some ingenious means are used to induce an intimate mingling of this air with the vaporized fuel, but it is not difficult to understand that this type of burner is sensitive to changes in weather, air currents about the chimney, and other factors which are apt to affect the uniformity and efficiency of combustion.

Mechanical-draft burners are very efficient. Providing the blast of air that burns their own oil spray, they are independent of weather or wind variations. They are adapted to full automatic control so that it is possible to turn the burner on the first chilly days in October, and forget about it—except for perhaps an occasional routine inspection—until it is time to turn it off in May. This robot will keep the house at any temperature the owner decides

upon, day and night the season through, by the mere setting of a thermostat. This is generally installed in the living room, away from abnormal drafts of air, radiators or hot-water or steam pipes. Inasmuch as the thermostat controls the burner within two degrees of the desired temperature, the normal operation of this class of burners is intermittent. It will burn for a time, shut off, or, in some cases, lower the flame, and repeat the operation as often as required to maintain the desired heat. Unlike the "natural-draft" burner, the flame goes completely out during rest periods in most of these burners. Its ignition is entirely automatic, either from a gas pilot light or an electric spark. Most models are equipped with either type of ignition. Some are provided with a combination of the two methods. There is little to choose between the two types of ignition, although some authorities favor gas for the heavier oils which are harder to ignite. In regions where a city supply of gas is not obtainable, one may use "bottled" cooking gas. Safety devices are always provided to arrest the flow of oil into the boiler in case it should fail to ignite within a specified period. In addition to the thermostat control, and the

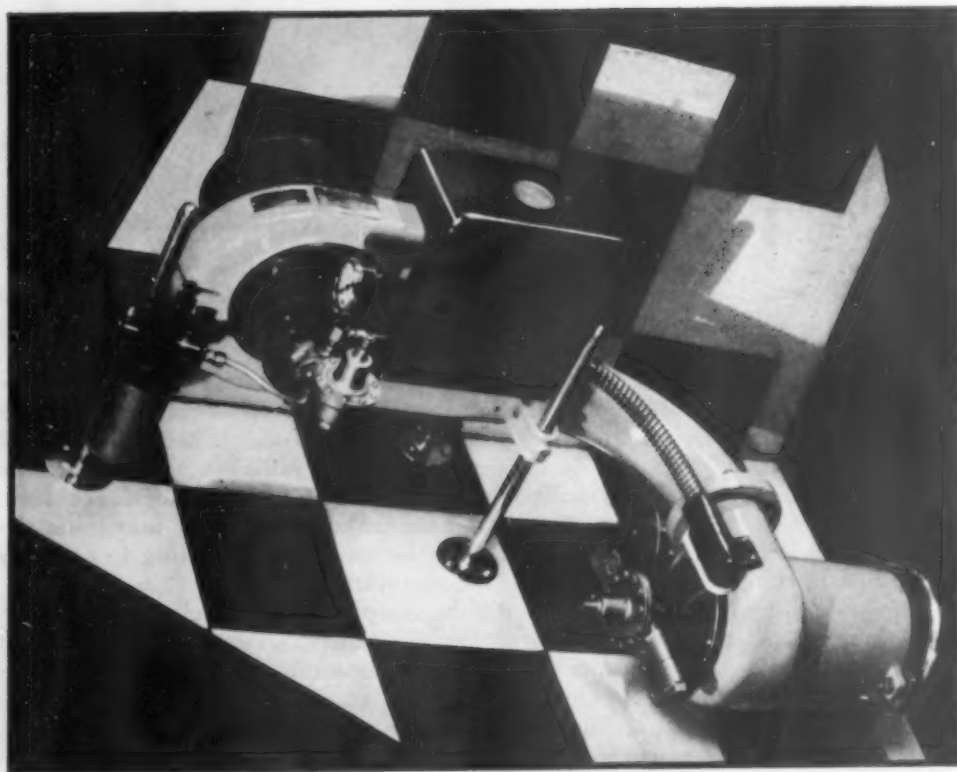
ignition safety control, there is a boiler or furnace safety control which makes for safety by limiting the boiler pressures or temperatures prevailing, regardless of the call of the room thermostat for heat. Thus, as an example, should windows be left open on a cold day, and the room thermostat naturally operate to keep the room temperature up to the predetermined degree, the boiler control will counteract this abnormal condition for additional, dangerous heat.

Although the methods of general operation of mechanical-draft burners differ, the choice of burner will depend upon other factors. Besides the importance of the grade of fuel locally available, as mentioned before, the type of installations done by the local dealer, and the question of price, another important factor enters into the final decision—how near is the "service" man. Like an automobile, or any other piece of mechanical equipment, an oil burner may occasionally stop operating. If the dealer is within call, the inconvenience will be minor. He should, at any rate, be able to furnish service within a few hours in an emergency. The choice between two excellent burners should be correctly made in favor of the alert, efficient repair man. The question of noise may be readily settled by "getting together" with owners of various types of mechanical-draft burners. Although noise in the present day burner has been reduced to a minimum in the moving elements, some burners permit a roaring sound in the combustion processes, which may be objectionable to owners of warm-air heating systems, where this sound may be transmitted throughout the house by means of the warm-air ducts. (Continued on page 510)



All the well-known makes of burners are dependable although their methods of operation vary considerably. The deciding factors in selecting one must be, besides price, the reliableness and accessibility of the local dealer and the type of oil available in a particular region. The burner at left will use an extremely heavy oil

Improvements in heating equipment are fast rehabilitating the cellar and making it a clean, livable room. Such a burner as the one shown below has a beauty of mechanical efficiency which detracts nothing from the decorative features of a game room in the cellar. This particular make atomizes the oil through small nozzles



Giant Pansies!

*Certainly, but it all depends
on the seed*

LEONARD BARRON



Photo less than half size

I WAS fortunate this season in having Pansy blooms that lived up to the exhibition standard, three to three and a half inches in diameter, and it was not a great cultural feat either. Indeed, anyone who wills may as easily duplicate the results. Naturally, I gave the plants proper attention at all stages of growth. Yes, and I fed them good food too, but the fact remains that the best attention given to the best seed will give you flowers that you could not get from the same attention given to seed of a poor strain. These Pansies, three and a half inches on stalks six to seven inches, I have been picking since February. As the season progresses and the weather gets hotter, the flowers get smaller. People must pay the price somewhere and in Pansies it happens to be in buying the highly bred strain.

Strain as applied to plants means a selection that some fancier has made over a long term of years, a selection in which he expresses his ideals by ruthlessly thinning out or roguing the plants that do not come up to par. Highly bred strains of this kind produce very little seed. It is a specialist's job anyhow to produce high quality seed of fine strains. It usually means hand work in fertilization. Only a few flowers on each plant are permitted to come to seed, or rather induced, because they are hand fertilized, and then only a small harvest is gathered. It is quite obvious that such seed must necessarily be high priced.

The particular strain illustrated above called Canadian Prize was developed in Canada. I don't mean to say that it is the only fine Pansy strain in the world, but I do know that it performs well because of conscientious selection by its maker. Pansies like cool conditions. Curiously enough, seed from a given strain grown in a cool climate will give better flowers in a hot climate than seeds of the same strain saved in a hot climate, so you have to go back to the original source every time if you want the finest results.

You would like to match these Pansies? Well, you can do it and have them next year almost anywhere but in the

extreme South, for the Pansy is a cool plant. A winter temperature of 40° to 45° in a greenhouse, for instance, is ideal.

For outdoor planting sow seed in August in a flat or even in the frame where it can be given shelter. Transplant when the plants are big enough to handle, a foot apart at least; I keep them in frames all the time. The soil? Well, any ordinary reasonable soil that you would use for the average run of plants will do, provided that it is well drained and contains a good deal of thoroughly rotted manure. If the soil is heavy, work in some sand to a depth of nine inches to give the plants root freedom and air. A little frost reaching them does no harm.

When they begin to grow vigorously, they will take water constantly, plenty of it; and as they were coming into bud, I gave a weak solution of a nitrogen chemical fertilizer just once and got great growth, but it was an unbalanced diet. The nitrogen gave vigorous growth but the foliage began to show phosphorus deficiency, that is, streaks of yellow about the midrib, and a corrective had to be given. Therefore, be careful in applying such quick acting chemicals—better use a complete fertilizer and be on the safe side.

PANSIES are easy to grow, and they are generous. The more you pick, the more you have. One thing about the highly developed strains is that you do not have to watch them quite so closely in the matter of preventing seeding as their tendency is to produce so little. You cannot buy high strain Pansy seed in named varieties. You have to get a mixture and select your own plants to suit your fancy and you may get a few reversions, which are worthless. But there is a good deal of fun in doing all this, I find; and so will you.

These giant Pansies are really quite modern things. In fact, the garden Pansy is only about a hundred years old anyhow, and the real progress was made since 1830. This large Show or Fancy Pansy does not belong in an "old-fashioned garden."



Mourning Iris (I. susiana) hard to grow in ordinary conditions as the Oncocyclus group must be kept from moisture all summer long

Plant Iris now

ROBERT WAYMAN



Japanese Iris, typical of the Beardless group that resents lime and loves moisture



Ib-Pall a large flowered form of the Pogocyclus group, blending the easy Tall Beard and the difficult Oncocyclus types. Intermediate in culture

THE "Tall Bearded" make up the main garden display of Iris and there is nothing that makes a better showing in the garden at any season. That best known section of the whole Iris family is however just one section of the Bearded Iris (Pogoniris), identified by the hairy beard-like substance on the lower petals, or falls. There are two other sub-divisions: the "Dwarfs," which are six to twelve inches high and, in the latitude of New York, bloom from the latter part of April until the middle of May; and the "Intermediates," which are from eighteen to twenty-four inches in height and follow the Dwarfs in bloom. The Tall Bearded Iris, blooming after the Intermediates, lasts until the middle of June. The Intermediates are fine for planting in front of them, and the Dwarfs make lovely rock garden subjects.

Growing this section is simple. They do well in any ordinary garden soil. They prefer a sunny location, but will also flower nicely in semi-shade and, while they will stand a great deal of neglect and are of the easiest culture, there is, of course, a right way to get the best results, as out of anything.

If you want Irises of real quality make your selections from the catalogue of an Iris specialist, and there are many such. It is only in such catalogues that you will find the modern kinds listed, for most of the varieties that are worth growing have been originated since the war. Have the plants sent to you in July, August, or September, if possible, for the very best time to transplant Bearded Iris is in mid-summer, when you would not dare to transplant other perennials. Planting can be

done successfully as long as the ground is not frozen, but if planted later than September they should be covered with a light covering of coarse litter the first winter, to prevent them from being thrown out of the ground by alternate freezing and thawing.

When you receive the plants they should have the foliage cut back to about eight inches if it has not already been done; shorten the roots and then plant with the fleshy rootstock (rhizome), left exposed to the sun, the fibrous roots being spread out and the earth packed firmly around the rhizome, *but not covering it*. Set about twelve inches apart and allow the pieces to grow into clumps. If there is plenty of space they can be planted eighteen inches apart and will grow into magnificent clumps in three to four years. They should need to be divided and replanted about every four or five years, simply to give room for the increase.

Good drainage is absolutely essential for Bearded Iris. This is often accomplished by raising the beds a few inches higher than the surrounding level. In heavy soil, especially where there is an inclination to excessive moisture, it is well to mix sand liberally in the topsoil to a depth of three inches. This gives thorough drainage and keeps the plants in perfect health. Use bonemeal as a fertilizer. This can be mixed with pulverized limestone, in about equal quantities, to keep the soil sweet. Bearded Iris do not do well in an acid soil and are at home in soil that has a lime content. Well cover the ground with this mixture twice a year, being turned in lightly, not deeply. Avoid manures, leafmold, peat or humus for Bearded Iris. (Continued on page 524)



I. korolkowi. Regelia type, must be grown in a frame



Has the community any rights over the shade trees you planted on the street curb, or are you absolute owner? What says the law?

Who owns your shade trees?

LESLIE CHILDS

THERE is no gainsaying the fact that the presence of shade trees along a street or highway adds to the value of the abutting property. The question then, of the right of an abutting property owner to the continued enjoyment of such trees becomes one of great interest to home owners in general.

As may be expected, this question has been prolific of long drawn out litigation in almost every state in the Union. And, while the holdings on the point are not entirely uniform, each case having turned on its particular facts and perhaps a local ordinance or statute, the weight of authority appears to give an abutting land owner a property right in street and highway shade trees.

Of course, such right is always subservient to the right of a municipality to remove or destroy such trees if this becomes necessary to the utility of a street or highway as such. But, aside from this, a land owner has an interest in the premises, as distinguished from that of the general public, that will support an action for damages for the unlawful removal or destruction of shade trees abutting his property. For illustration:

IN A recent case handed down by the Supreme Court of Vermont, the plaintiff owned and occupied a residence in a certain village. In front of the premises there were two large shade trees, a Maple and a Poplar, which were greatly prized by the plaintiff. A tree warden of the village decided that these trees were dangerous to the public, and cut them down, without complying with the statutory provisions in respect to the removal of trees in streets.

The plaintiff, as the abutting property owner, thereupon brought instant action for damages. The defendants took the position that since the plaintiff did not own the fee in the street, and since her property had not been invaded, she had no cause of action. In other words, the contention was, that a property owner who did not own the fee in a street had no right of property in shade trees growing therein that would support an action for damages for their destruction. In denying this contention, and in upholding the right of the plaintiff to recover, the court reasoned as follows:

THE rights of an abutting owner in an adjacent street or highway are of two distinct kinds, public rights which he enjoys in common with all other citizens, and certain private rights which arise from the ownership of property contiguous to the highway, which are not common to the public in general, and this irrespective of whether the fee to the highway is in him or in the public. Certain of the latter rights constitute property, (Continued on page 536)



The site of this garden was low and naturally wet, but by raising and "rocking" the beds even such dry subjects as Irises are made to flourish

When the soil's too wet

And plants do not grow well

SHERMAN R. DUFFY

WE MUST be dry to be legal and at least well drained to be horticulturally successful. It is a simple enough matter to water a garden when it becomes dry, but drying a garden that remains discouragingly wet is another and much more difficult problem. Soggy soil is rather a common condition in many urban communities, especially those where subdivisions have been built up on soil that was originally low and inclined to be swampy. We encounter many such communities that are now desirable residence districts.

A similar condition of undue wetness is found in situations otherwise well enough drained but consisting of a heavy clay subsoil that holds moisture in the surface soil.

Usually the advice is to tile and quite as usually it is altogether impracticable to tile, especially in a small place. In the average town lot tiling is out of the question because of

the lack of an outlet or any drainage system outside the sewers in the streets which cannot be tapped for tile lines. Those who have been agriculturally deflated shudder at the mere mention of tile. They know the price to be paid for it and the levies that have been made upon them for drainage systems and tile lines although well knowing the value of good drainage however painful its acquisition.

An easy alternative in the small place where soil is so soggy that it hampers gardening operations is raising the portion set apart for a garden by filling in a few loads of earth and holding it in place and maintaining a higher level with rockwork. It is vastly cheaper and more sightly with conditions much more quickly regulated and restored than if a tile ditch had to be dug across the premises. A few loads of good soil always procurable at not too great expense held in place by low dry walls of rock, (continued on page 527)

The long and short of evergreens

Small quick growing kinds not substitutes for dwarfs

ROMAINE B. WARE

WHEN you spend five, twenty-five, or a hundred dollars for a single specimen or for a group of evergreens, how permanent do you expect the planting to be? I don't mean how long you expect it to live, but how many years do you anticipate the planting will remain desirable and artistically pleasing?

It might almost be said that some plants are deceitful, in that they seem so desirable when seen at the nursery but when purchased and planted in your yards and gardens, the results are frequently not what you thought they would be. Many times, plants bought as neat, small specimens, grow quickly into tall ungainly giants. Still we cannot say truthfully that the plants are deceitful; it is simply that the home planter seems unwilling to go into the subject thoroughly. Plants are living things, they have certain natural habits, certain ultimate sizes, which they may be expected to attain, and they run surprisingly true to form, too!

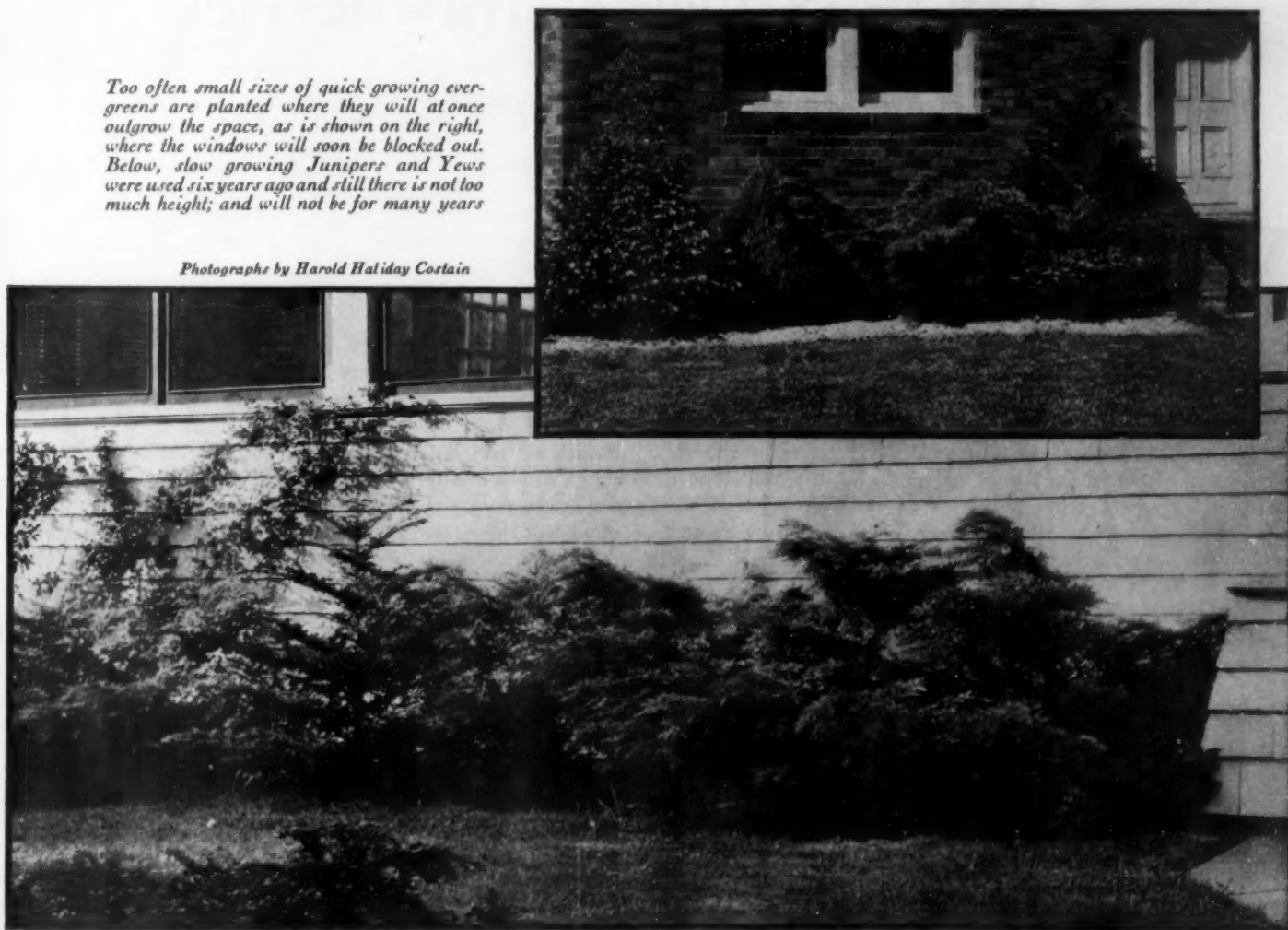
Recent years have seen a great increase in the use of evergreens around the home, because in many respects they have advantages over deciduous shrubs and trees. They are in full foliage the entire twelve months and can perform their function as screen, enclosure, or background more

effectively for this reason. They lend a welcome degree of color and become the cheering element in wintertime in many an otherwise monotonous landscaping.

The selection of individual kinds must depend entirely upon the use to which the plants are to be put. They differ greatly within the individual species or families. For example, take the Pines. The Mugho Pine (*Pinus montana mughus*) grows only two to four feet tall while the White Pine (*P. strobus*) reaches sixty to a hundred feet or more. So, also with Spruces (*Picea*). Gregory's Spruce (*P. excelsa gregoriana*) is a dwarf slow growing variety of the Norway Spruce seldom attaining a height of more than three feet, while the type naturally grows sixty or more feet tall. In spite of which, literally hundreds of thousands of Norway Spruce are planted annually in average yards and around foundations. Why? Because the Norway Spruce grows easily, makes a natty, good looking plant when small, and attaining a marketable size in a very few years it can be sold profitably at a very low price. The dwarf varieties, cost many times as much to produce in very small sizes. Gregory's Dwarf Spruce is priced at \$3.00 for a six to twelve-inch specimen, while Norway Spruce (Continued on page 527)

Too often small sizes of quick growing evergreens are planted where they will at once outgrow the space, as is shown on the right, where the windows will soon be blocked out. Below, slow growing Junipers and Yews were used six years ago and still there is not too much height; and will not be for many years

Photographs by Harold Haliday Costain





August planting of strawberries is profitable in the home garden and is nature's own method

Your next year's strawberries

Why the home gardener can plant in August

MAURICE G. KAINS

WHAT'S all this about planting strawberries in August? I mean can we expect fruit next summer from plants we set this month?"

These queries put at the conclusion of my lecture on pruning (!) before a garden club started the verbal Donnybrook Fair of question and answer that follows—with additions to round out the subject.

"Whether or not you can 'expect fruit,' will depend upon *you* more than on the time you plant. If you treat it well every plant should bear about as much as it would if left where it started to grow."

"If that's true why do commercial strawberry growers plant in the spring and wait until the second summer before getting fruit? If August planting is so satisfactory why don't they practice it? This August planting looks 'fishy' to me!"

"Suppose you impersonate a strawberry plant," I suggested, "while I ask you a few questions."

"Well, how do strawberry plants originate?" "From seeds and runners. Seeds produce new varieties and runners the same variety as the plant that starts them."

"True. Let's forget the seedlings. When do the runners begin to grow?"

"The first ones start shortly after the fruit season ends. Others follow until late fall."

"If we leave these young plants where they start, when will they bear their first fruit?"

"The following—say!" he broke off. "You've caught me! Of course, they bear early the following summer. So we can just as well expect fruit if we transplant them as if we

leave them where they start to grow. Funny, I never thought of that before!"

"But do you also see why commercial growers plant in spring?"

"Of course, it's to get a start—to use the plants they set merely as the starters of runner plants that will bear fruit the following year."

"More than that! Commercial growers can't give the attention that August transplanted plants must have and which amateurs are glad to give. They must plant and cultivate largely by machinery and accept their losses of plants as part of the game. It costs them less to replace these losses and to cultivate their acres a whole season and part of the second (up to fruiting time) than to manage a much smaller August planted area."

"Are we to conclude that runner strawberry plants lay the foundation of their fruit bearing success during the season previous to that in which they bear?"

"Yes, that is the fact. But few people realize it. They merely discover a crop of fruit; they deserve no credit for it."

FOR best results, the soil must be well supplied with decaying vegetable matter and plant food. In these days we must fall back on artificial manure, compost of our own making, granulated peat moss, or commercial humus already in the soil at the time of plant setting and liberal feeding during the balance of the season.

It is during the late summer and autumn months that the blossom buds develop, so the better we treat our strawberry plants then the more fruit we may (Continued on page 538)

\$27,500

in prizes for architects

Class A: Design for a bathroom suitable for homes costing not more than \$15,000 to build.

First prize	\$5,000.00
Second prize	2,500.00
Third prize	1,000.00
Fourth prize	500.00
Fifth prize	250.00
Ten prizes of	100.00
Twenty prizes of	50.00
One hundred prizes of	25.00
	<u>\$13,750.00</u>

Class B: Design for a bathroom suitable for homes in the building of which cost is not a major consideration.

First prize	\$5,000.00
Second prize	2,500.00
Third prize	1,000.00
Fourth prize	500.00
Fifth prize	250.00
Ten prizes of	100.00
Twenty prizes of	50.00
One hundred prizes of	25.00
	<u>\$13,750.00</u>

Complete statement of conditions governing the competition

Eligibility: The competition is open to architects and architectural draftsmen. Designs may be submitted as the work of one or more architects, of one or more architectural draftsmen, or of a firm of architects.

Each architectural draftsman shall give on the card referred to under paragraph, "Identification", in addition to his name, the name of a practicing architect as a reference.

Application blanks are not required.

No employee of the American Radiator & Standard Sanitary Corporation may enter the competition.

Time: The competition closes 12 Midnight, October 30, 1930. Designs must be postmarked before that hour.

Drawings required: (a) An elevation of each side of the bathroom (room may be rectangular, octagonal or any desired shape); (b) Floor plan; (c) Ceiling plan, where special treatment is indicated.

The elevations shall be drawn at a scale of three-quarters of an inch to a foot; the floor and ceiling plans at a scale of three-eighths of an inch to a foot.

Designs for Class "A" and Class "B" bathrooms shall be drawn on separate sheets, each mounted on cardboard twenty-six by thirty-nine inches. Each sheet shall have the title "A Design for a Bathroom—Class 'A' (or) Class 'B', (as the case may be). Drawings shall not be framed.

All drawings shall be made in black ink. The sides of the bathroom shall be shown in direct elevation and no perspective elevation or rendering of any kind shall be shown.

A color chart indicating the color of the plumbing fixtures, walls, ceiling, floor and decorations shall be shown. A legend shall be given indicating the materials used and a list of the plumbing fixtures and accessories shall be given.

A competitor may submit one design in Class "A" and one design in Class "B", but not more than one design in each class may be submitted by any competitor, group or firm.

Plumbing fixtures and fittings: The selection of fixtures and fittings shall be made from the designs illustrated in the "Standard" general catalogue, or in the book, "Standard" Plumbing Fixtures for the Home. The book, "Standard" Plumbing Fixtures for the Home, and a color chart will be mailed upon request.

The plumbing fixtures shall be in one of the nine colors in which "Standard" Plumbing Fixtures are made, or in white.

Designs entered in Class "A" shall show one lavatory, one water closet and one bath and may or may not include a shower above the bath. Number and character of plumbing fixtures and fittings are not limited for designs in class "B".

Identification: The competitor's name shall not appear on the design. On the back of the mount the competitor shall draw an identification mark. This mark shall also be drawn on a card, three inches by five inches, bearing the competitor's name and address. This card shall be placed in a plain envelope, sealed and glued to the back of the mount.

Where to send drawings: Drawings shall be sent prepaid, or delivered to: Standard Sanitary Mfg. Co., Competition Committee, Pittsburgh, Pa.

Care should be exercised in preparing the designs for mailing so that they will be received in good condition. Each design entered in the competition is submitted at the risk of the competitor. The Standard Sanitary Mfg. Co. will not be responsible for the loss of, or damage to, designs while in transit or in its custody.

Title to designs: The prize-winning designs become the sole property of the Standard Sanitary Mfg. Co. The Standard Sanitary Mfg. Co. reserves the right to publish or reproduce any prize-winning design, or to make it adaptable for publication or reproduction. Should the Standard Sanitary Mfg. Co. desire to publish or reproduce a competitor's design, he will be extended the privilege of signing his work.

Jury of awards: The designs will be judged by a jury of awards composed of the following architects: William H. Beers, A. I. A., of Beers & Farley, New York City; Addison B. Le Boutellier, A. I. A., of Ripley & Le Boutellier, Boston; Eugene H. Klaber, A. I. A., of E. H. Klaber & E. A. Grunsfeld, Jr., Chicago; Louis C. Mullgardt, F. A. I. A., San Francisco; Allison Owen, F. A. I. A., of Diboll & Owen, New Orleans.

Points on which the designs will be judged: (a) Originality, (b) Practicability, (c) Distinctiveness in color scheme and in arrangement of fixtures, (d) Suitability in the use of materials.

Announcement of awards: The names of the prize winners will be announced as soon as possible after the closing date of the competition.

Professional adviser: The professional adviser of the Standard Sanitary Mfg. Co. in this competition is Howard K. Jones, A. I. A., of Alden, Harlow & Jones, Architects, Pittsburgh, Pa.

This program has received the approval of the Committee on Competitions, Pittsburgh Chapter, American Institute of Architects.

Requests for further information regarding this competition should be addressed to the Standard Sanitary Mfg. Co., Pittsburgh, Pa.

Standard Sanitary Mfg. Co.

Competition Committee 106 Sixth Street, Pittsburgh, Pa.

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A cross section of a "rotary disk" type of burner showing the motor (below) which revolves the atomizing disk (above)

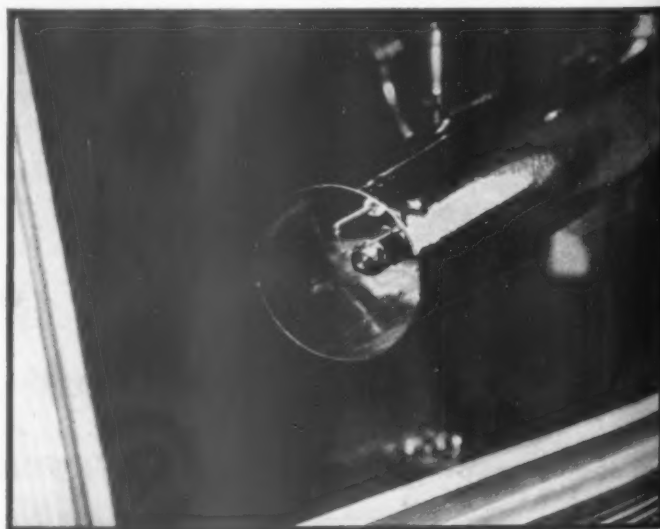
The business of buying an oil burner

Continued from page 500

Briefly, mechanical-draft burners, which atomize the oil either by mechanical means or by spray devices, may be subdivided into two classes: (1) gun-type and (2) rotary-disk. Probably the most common type is the former, with its mechanism outside the boiler and a tube poking in. It shoots a mixed spray of air and oil, generally under pressure, through this tube into the boiler, which becomes, when ignited, a blast of yellow flame. There are many ingenious ways of atomizing the oil and mixing it with the proper amount of air to obtain complete combustion. One type breaks up the oil by forcing it under pressure through narrow nozzles of various types. Another blows a spray of oil mist from a device resembling nothing so much as the familiar perfume atomizer, and another type utilizes a mixing chamber in which the oil is atomized with compressed air and shot through the tube into the boiler where an additional supply of air aids combustion. These gun-types are all designed to burn the heavy, cheaper number 3 oil. They will also burn the less efficient, lighter oils. At least one will burn number 4 which is an extremely heavy oil.

The "rotary-disk" type employs a radically different method of atomizing oil. This type, which is generally adapted only to the use of the light, volatile number 1 oil, employs a burner placed entirely within the boiler. This type has a whirling disk, or cup which atomizes the oil thrown from the periphery. It is generally spun, at high speed, by an electric motor directly beneath it in the former ash-pit of the furnace or boiler. Oil is raised to the whirling member in various ways, from which the centrifugal force sprays it in all directions together with the air required for combustion. The fire burns at the outer edge of a refractory hearth, or burns in a cone-shaped spread in suspension.

The comparison between oil burners and the old-fashioned coal-fired furnaces is much like that between the ice boxes and mechanical refrigerators. One is more convenient, cleaner, and, usually, more expensive. Oil burners are, of course, saving of space, too. They can be compared with coal-fired furnaces only when the latter employ a mechanical stoking apparatus, otherwise oil burners are in every way more desirable.



The "business end" of a "gun" type of burner showing the interior nozzle which atomizes the oil as it is forced into the boiler. The electrical poles where the igniting spark is made are at the end of the nozzle

August admits you couldn't swap boilers in mid-winter. On the other hand August offers you the best season of the year in which to correct last winter's heating troubles, so that they will never plague you again in the winters to come.

Jog your memory. What was your trouble? Did your cost of heating make you groan? Was your boiler exasperatingly slow to heat the house on cold mornings, and did the family have to shiver until mid-forenoon? Did your boiler let you down completely on extra cold days and flatly refuse to make the house comfortable no matter how much fuel you burned?

Fundamentally all heating troubles are due to a lack of efficiency in the boiler used. The only remedy is to get rid of the inefficient boiler and install an efficient one in its place. That means a boiler with plenty of Fire Surface. No boiler can be efficient unless it has plenty of Fire Surface. Economy and comfort alike depend upon it.

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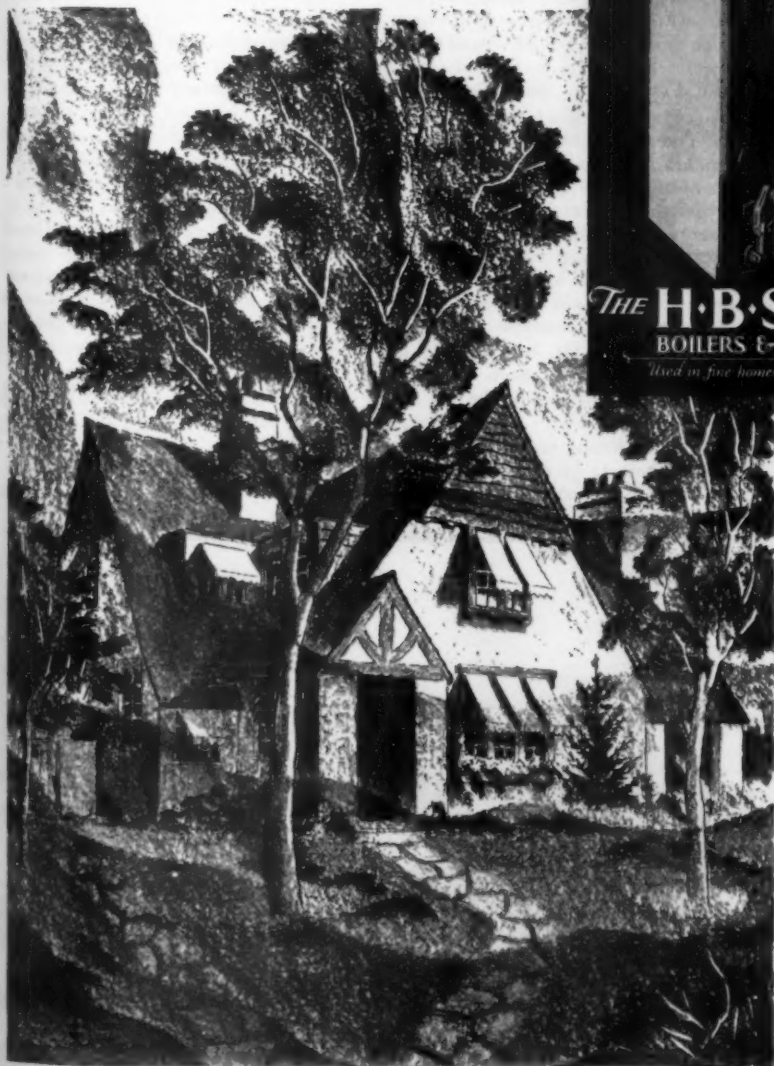
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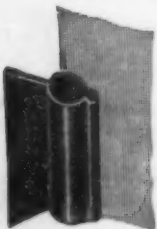
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A SECTION through guide showing lug in seldedge of screen wire which prevents sagging. A "non-sagging" feature found only in Rolscreens.



An individual cook kit ready for use on the folding fire grate. Alongside, an aluminum canteen in khaki cover. (Photographs courtesy, Stern Bros., Camp and Campus Bureau)

Down the Gypsy Trail

Continued from page 480

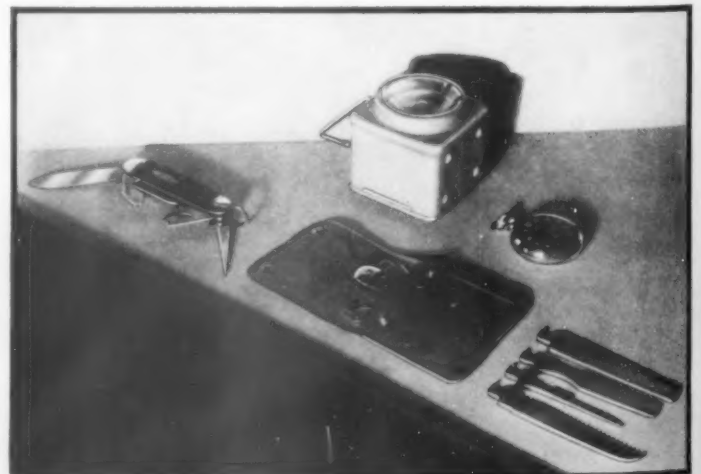
the official Boy Scout knife, which has one large blade, a can opener, a punch, and other useful pieces—all for \$1.50. And since even the best of summers has a few rainy days the hiker's knapsack should be waterproof, while a rubber poncho will save many a holiday from ruin by untimely dampness. These useful articles should cost about \$4.00 and \$5.00 respectively.

But to return to the fitting up of our temporary retreat in the wilderness. The great fundamental principle in making an outing enjoyable is to take along absolutely nothing that is not essential, but at the same time to be very careful that the equipment is complete. The most efficient camper we know has his island cabin hung round with an outfit that begins with barometers and telescopes and ends in a shoe repair kit, but most of us will be content with much less. And our first thought should be on the matter of furniture.

Just as in fitting up an apartment, the first item to be considered is the bed—and how many holidays have

been ruined by the wrong one! A well made folding cot, khaki covered and strong, is the beginning, and the cost should be about \$3.00. One department store includes in its camping department what are considered by experts as the right weight and value in sheeting, pillows, pillow slips, and towels. The blankets they recommend are especially good—one hundred per cent wool, very thickly napped, and giving the maximum of lightness combined with warmth. Best of all, they are wide enough so that in making up a cot bed they go right around and meet underneath. The occupant slips in feet first as if going into a sleeping bag. These blankets are in solid shades—reds, greens, and khaki, and cost about \$10.00 for a pair. A cot mattress may be found in such gay shades that it may also be a most decorative object if spread on the beach for the daily sun bath. The filling is of one hundred per cent sterilized cotton and the price \$1.95.

It is a great comfort to know that a camp chair (Continued on page 514)



A Boy Scout knife, tool kit whose various pieces all fit one handle, radium dialled watch, with a compass in its stem, and a flashlight



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The Oliver Ellsworth house at Windsor, Conn., built of White Pine about 1750, and standing today

ABOVE THE COOL, green lawn, lovely elms play and murmur with the breeze. The sunlight races through the leaves, and flickers, elflike, in the cheer and friendliness of a curtained room. Voices rise in the pleasant hum of conversation. . . .

You will find these beautiful old places throughout New England . . . quiet, livable spots built by craftsmen when the Colonies were young. In almost every case, genuine White Pine was used. . . . Today, Idaho (genuine) White Pine may be selected for your own home!

Years mean nothing to Idaho White Pine. It is nature's finest building lumber. The sun and storm of generations can have little effect upon it . . . exposure to the weather will only increase its charm. And the surface, smooth with the sheen of satin, will remain that way, the grain a thing of beauty.

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This trade-mark is imprinted on Idaho White Pine at the mills—and is a definite protection for home owner, builder, architect and lumber dealer.

Down the gypsy trail

Continued from page 512

will not decide to collapse when sat on and that it will fold flat and compactly when requested, but in addition to these good qualities the new camp chairs have still another—seats and backs in gay colors instead of the conventional khaki. Favorite shades are orange or green, with a few striped combinations, and they may be found in stools, ordinary chairs, and particularly luxurious arm chairs, prices ranging from seventy-five cents up. The longer the time your camp is to be pitched, the more equipment you will want; a folding washstand complete with towel rack is a convenience and hanging canvas wall pockets with a good sized mirror and plenty of compartments for toilet articles will be a blessing to the man who finds difficulty in shaving with the waters of the lake as a looking glass.

The problem of light in camp is one of the worst worries to spoiled children of the age of electricity, but with the new flashlights and lanterns there is no more trouble involved than when we press a button at home. The flashlight lantern shown in one of our photographs is a tremendously useful fellow; it may be carried in the hand, hung on the tent wall or fastened to the belt to show the way on a dark path up from the lake when one's hands are full of canoe paddles and cushions. It comes in a number of sizes, priced from \$1.75 up. Even the standard pocket flashlight has developed a new faculty—that of giving diffused light or narrowing

down to an intense focus. And, of course, there is always the common old style oil lantern, priced well under \$2.00, which many veteran campers continue to swear by.

Important as are these furnishings and fittings, if most campers were asked what was their chief interest in life they would probably answer: "Food!" And, fortunately, for the hungry thousands who people our summer woods, camp cooking utensils are so highly developed that their use may be as fine an art as that of any indoor kitchen.

For dishes there is nothing to equal the white enamel plates and cups which cost about thirty-two cents each, unless it be one of the graniteware cooking sets consisting of cups, plates, knives, forks, spoons, coffee pot and one large pot with lid into which the set can be packed for travelling. This kit for six people should cost about \$4.00. For making coffee the business-like looking boiler in our photograph is a great comfort. It holds an almost endless number of cups and is most efficiently designed to prevent tipping over. For all these good qualities one pays \$1.29.

If you are within reach of civilization to the extent of being able to secure ice, a portable refrigerator will make all the difference in the world to perishable foods. Even if ice is not available it makes an excellent food chest to keep out prowling porcupines or the still more pesky ant; also, it will remain a cooler if half submerged in a shady pool by a lake.

Making the small house seem large

Continued from page 494

compromise and adopt a middle course. You cannot juggle very much with the scale of a stair; its measurements are governed by the human form and by the immutable laws of physics. By adroit manipulation you could probably make a bad stair look satisfactory, but you would pay for it by chronic discomfort.

Except in the case of the stair, with whose actual dimension it is not wise to meddle, you can do much towards increasing the sense of interior spaciousness by nice adjustments of scale. To this end, keep all moldings of low projection and refined contour. Nothing will cramp and crowd a small room more, even though it may be entirely void of movable furniture, or diminish its apparent size more quickly, than a heavy cornice, large and heavy moldings, and other woodwork details, large panes of glass in the windows, or heavily scaled items of any sort. This does not mean that all interior features must be of Lilliputian proportions so that a person of average size will feel as though he were in a doll's house; it does mean that it is a mistake to have heavily scaled things in a small space where you wish to preserve a sense of unhampered freedom.

To give one or two illustrations—if you hang curtains with a large scale pattern in a small room they will at once overwhelm and outweigh the whole composition. If, on the contrary, the curtains have a small repeat

pattern, you will see immediately that they do not cause a smothering sense of heaviness and discomfort, but seem to take their place with natural propriety. Again, if you put a Sheraton side table, with its thin reeded legs and all its proportions of exquisite delicacy, in a certain location, it will furnish that place without crowding it. If you put another table of the same height and the same size top, but with heavy melon-shaped Jacobean legs, stout stretchers, and a plank top nearly two inches thick, where the Sheraton table stood before, you will see that it crowds the space and overbalances the small room. The difference of effect in this case is purely a matter of scale, just as it was in the case of the curtain patterns.

It is obvious, then, if you wish the small house to seem spacious within, you must avoid heavy or massive scale in either the fixed decoration or the movable furnishings. Door knobs and hinges, drawer pulls, all moldings, stair balustrade spindles, handrail, curtain pattern, the pattern of rugs or carpet, upholstery fabrics—in short, every incident that enters into the interior composition must be of a refined scale that will be consistent with the actual total interior dimensions. Preserving a refined scale throughout does not at all imply lack of character, either in the ensemble or in the individual factors that enter (Continued on page 515)

Making the small house seem large

Continued from page 514

into it. A thing may be of refined scale and, at the same time, full of incisive character.

To maintain thus a scale consistent with the actual size of the small interior, in both fixed equipment and movable furnishings, does not demand any curtailment of utility or comfort. You are not fitting up a doll's house, nor are you sacrificing convenience to secure a more ample appearance. On the contrary, you are simply exercising good judgment and extracting the maximum of capacity from the minimum of physical space. You can have chairs and sofas that are just as roomy and comfortable as if you chose them of heavier proportions, and just as substantial for wear. A Sheraton sofa is just as capacious and comfortable as a sofa of late Empire type. In point of actual size, it is just as large, although it does not appear to take up as much space on account of its scale.

Before leaving the matter of scale, remember in your scheme that you can either crowd a small interior or give it the full advantage of its size by the mode of coloring used and by the texture of the fabrics employed quite as much as you can by the scale of the patterns in curtains, wallpaper, upholstery or carpet. Coarse, heavy textures absorb light and appear to take up more space than close, smooth textures that have more or less reflective quality. Again, if you paint the walls of a small room a fairly dark early Georgian green, it will seem much smaller than if the walls are painted a light Regency pea green, saffron color, pearl lavender or light Chinese pink. The key of coloring and the advancing or receding quality of color have much to do with the apparent size of an interior.

Apparent spaciousness in the small house also depends upon articulate furnishing. Furniture is meant primarily to be used. Common sense and purpose, therefore, should determine not only what things you will have in a room but also their placing. To look at some rooms, where the arrangement of the furniture is not articulated, you would never imagine that any of the furniture was meant to be used. Such things, for example, as a secretary so placed that a person writing at it has no light or, at any

rate, no light falling from the left as it should; a comfortable chair poked in a corner where no one wishes to sit or a piano set where the player can neither see well nor be at ease in playing, too often confront us. Again, sofas or other articles of furniture canted across corners, or set at whimsical angles, simply throw a room out of joint and destroy all feeling of coordination. Some people mumble their words so that it is always an effort to understand what they say; we call them inarticulate. Others speak so clearly that not a syllable is lost and it is always pleasant to hear them; they are fully articulate and are never misunderstood as are the former. In the effect of their furnishing, rooms and houses are much the same as people's speech. A jumbled or inarticulate room is prodigal of space and almost invariably seems crowded; a coordinated room gets the most out of the space there is without seeming crowded.

Articulation in furnishing means that there should be a definite system in the arrangement. Common sense and purpose in effecting articulation mean deciding just what pieces of furniture are necessary in a room, and then putting them where they will best serve the purpose intended. Don't fill up a room with superfluities introduced without definite and specific purpose. What pieces there are should be good and adequate, and by placing them where their natural use indicates, you will make them count effectively. Put easy chairs where one naturally prefers to sit, secretaries or writing tables where there will be a good light coming from the left, and so on. Common sense in articulate furnishing is merely considering the *raison d'être* of each piece. Place the larger pieces first; the other things will naturally group themselves in relation from associated usage. Avoid setting pieces forth by themselves in the middle of the room, unless there is some real reason for their being there. Free, open areas contribute to a sense of spaciousness. There need be no fear that the observance of a rational system of arrangement, as just indicated, will cause a stiff, mechanical effect; obvious fitness to purpose and the incidents of daily use will prevent that.

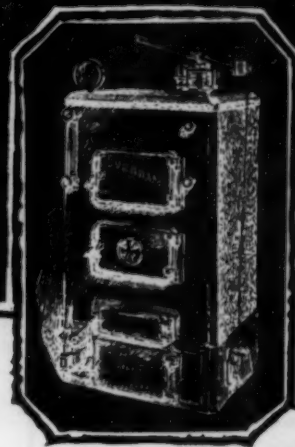
Garden furnishings

Continued from page 486

for setting in place, will be purchased from dealers in garden accessories, and others will doubtless be specially built, not infrequently by the garden owner himself. Some, especially for grounds of the former order, will be of artificial stone construction, designed on classic lines; some, on the other hand, will be constructed of real stone, or of stone and concrete combined, and probably expressly intended for a rustic setting; and some will be built of wood, attractively painted. And if none of these kinds should hold promise of satisfaction, for the purpose to be served, there still remain for selection the various seats of the chair or settee type, made of reed, hickory, enameled wood, or

metal, which one buys mainly for the protected summerhouse or for use in conjunction with a garden umbrella and table.

Special sets of garden furniture, consisting of chairs, swing seats, tables, and bright-colored umbrellas, also frequently bring to the grounds of a home increased charm and attractiveness, besides constituting a source of outdoor enjoyment. They, of course, may be purchased in all sorts of colors and color combinations, and, therefore, are especially effective in developing colorfulness in the garden. Then, too, they offer the particular advantage of being easy to move from one place in the grounds to another.



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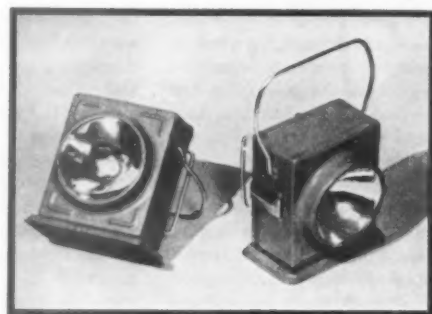


Devices for American Homes

Conducted By
Shirley Paine



This month we are showing a group of seven very new and interesting small electric household devices at moderate price. All of these are fully guaranteed by their manufacturers. In order to expedite delivery and avoid delay, no matter how slight, we are now listing the name and address of the place to which orders should be sent. To speed shipment, send check or money order direct to firm name given.

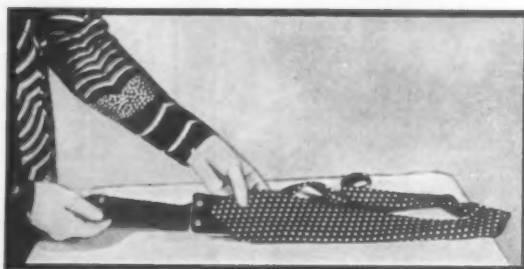


WHILE looking through Hammacher, Schlemmer & Company last week a fine electric iron caught my eye. Set the control lever for any heat desired, and it automatically keeps it constant at that point. Metal encased switch plug; long cool handle; long-life cord. Complete with stand, \$7.50. . . . I also discovered "Biddy." In case you haven't met "Biddy" let me say that it is a brand new combined orange reamer and drink mixer that works! Has a powerful little motor; reamer on swivel. Fine for milk shakes, etc. Complete with wall bracket, screws and a glass. 110 volt AC or DC; \$14.95. Both items prepaid 100 miles NY. The address is 133 4th Ave., attention Mr. Siebert.



LEWIS & CONGER of 78 West 45th Street, New York, are the sponsors for this very practical flash-lamp. It hangs on the belt to keep hands free. Ideal for motoring or camping, and general use. Hinged handle makes easel support to throw light any angle when changing a tire or making repairs. It is \$1.65 delivered 100 miles NY; \$1.95 p'paid elsewhere.

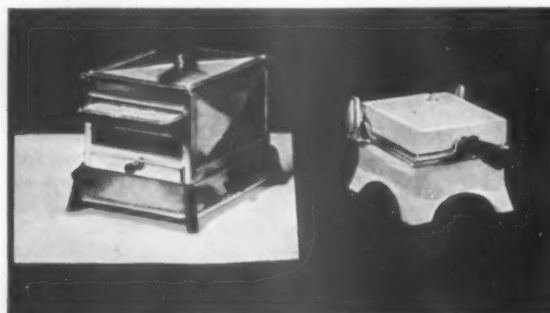
A CHECK for \$6.50 to the Robinson Sales Company, of 149 5th Avenue brings you this heater postpaid—and steaming hot water instantaneously direct from the cold faucet, wherever there's electricity. A boon to all summer cottages, surely. It is guaranteed; 110 to 130 volts, AC or DC. Slips on and off faucet quickly and easily.



FROM a maze of fascinating shelves all a-gleam with things to delight any housewife's heart I made this discovery—an electric cut-off, clever as can be. Positive action automatically cuts off percolator, egg boiler, fan, washer, anything at exactly the time set. Has two outlets—one automatic time-set, the other for ordinary use; 110 volt, AC or DC. Made of handsome mottled green bakelite, Lewis & Conger offers it in an attractive gift carton for \$6.75 p'paid east of Mississippi. The address of this store is 78 West 45th Street, New York.

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THE new automatic toaster (below, left) is silent, all electric, only one lever to move; removable crumb drawer. It toasts 2 slices at once, is chromium plated, colored trim, and with 6 ft. silk covered cord. 110 volt AC or DC; \$9.75 p'paid. The new sandwich toaster (below, right) makes it unnecessary to toast bread separately. Works instantly, seals the flavor in; self-adjusts to any thickness; also makes perfect dry toast. In iridescent, heat-proof china, \$12.50; in chromium plate, \$10. All p'paid. A feature of Saul Haber & Associates, Inc., at 100 West 40th St., New York.



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Under the looking glass

Continued from page 485

an essential part of the arrangement, while a low bench before the table completes a dressing table group that appeals particularly to lovers of modern decoration.

If a bedroom is small a flat-topped table may combine the functions of both dressing table and desk, with toilet articles kept in one of the drawers, and desk equipment in the others. A mirror should be hung by two cords over such a table, or a swinging mirror in a wooden frame may stand on it in the English fashion.

Draped dressing tables have a quality that appeals to the feminine heart, and this type is, perhaps, the most popular of all. It is appropriate in every type of room except the modernistic. The frame may be any of the simple, inexpensive shapes we have suggested, which are all well within the range of any pocket-book. There are a few suggestions about making one of these tables which may be helpful to you. The table may be large or small; its size will be governed, of course, by the space you can give to it in your bedroom. Whatever its shape, the top should first be covered with a breadth of thick, soft material which may be cotton flannel, silence cloth, or cotton wadding. After this is in place, it is covered with a breadth of cotton cloth tightly stretched, which, in turn, is tacked down along the edges of the table with a breadth of the drapery fabric placed over it. Gimp may be used for a finish, or one of the ready-made, pleated edgings which come in a great variety of colors and finishes, and may be found to suit any type of table or finish.

The breadths that are to form the drapery around the table may open down the front if there are drawers inside which you wish to be able to reach, or made in one piece of breadths sewed together. About fifty per cent fullness should be allowed for a good effect, for any appearance

of skimpiness is unpleasant. If the table has swinging arms the drapery should be attached to them, and the interior frame painted or enameled in any color you wish. The linings of the drawers give opportunity for originality in treatment, as they may be painted a contrasting color, or lined with gold, silver, or quaintly figured papers.

Toilet table equipment is bewilderingly beautiful nowadays. All the fripperies used on dressing tables, scent bottles, perfume trays, atomizers, boxes, and jars in lovely shapes and gorgeous colors may be found in the shops at present at most reasonable prices.

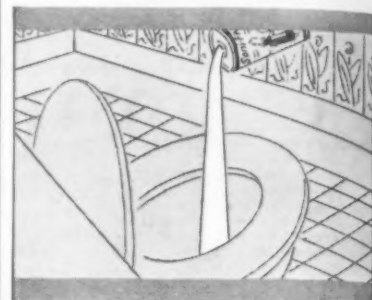
The draped toilet table on this page suggests a delightful model to use in a room with maple furniture. It is kidney-shaped, 18" x 36" in size, and embellished with a semi-glazed chintz having a design of bouquets of flowers in mauve, amethyst, cream, and green on it. The little frilled edging is mauve and finishes the draperies all the way around, as well as being pasted down flat to make a covering for the table edge. There are tall boudoir lamps of amethyst glass, with shades of matching organdie, finished with bands and knotted loops of narrow lavender, green, and gold ribbon. The dainty toilet set has a design in silver on cream, while the bottles are of amethyst glass. The quicksilver vase which holds sprays of lavender flowers, reflects all the colors of the room in its silvery surface. A Colonial mirror, encased in a scrolled maple frame, hangs above the little table, and completes a delightful and inexpensive arrangement.

The picture on page 485, shows a modern reproduction of a French poudreuse with a stool before it in matching walnut. The toilet set used here has a quaint provincial toile de Jouy design in burgundy red on a cream background, and the tall candlesticks are of quicksilver glass.



Exquisite charm is typified by this dressing table draped with semi-glazed chintz in mauve, amethyst, cream, and green. (Courtesy, Jane White Lonsdale. Toilet set, Du Pont Viscoid)

What could be simpler?

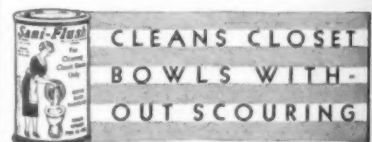


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The part that details play in decoration

Continued from page 498

colors can be combined with conservative Colonial furniture. The mahogany furniture seemed to take on new charm when set off by the vivid walls and woodwork, while the strong colors themselves were softened and modified by the simple dignity of the Colonial pieces.

The pent house apartment was in browns, light and dark, cream, tan, and vermilion, with accents of black here and there—a striking scheme, and one which was much admired by the visiting public. The colors made a perfect background for the furnishings where the severe constructional designs of the modern pieces combined very interestingly with the fluent curves and graceful contours of the French provincial furniture used with them.

The draperies and the coverings of the low modern armchairs and deep couch were of creamy rayon crash in a rather rough weave, while the severely simple bindings and valances on the curtains were of tobacco brown rayon satin. This material was used also for cushions on some of the French provincial pieces, and for the bases of the modern armchairs and couch, which, by the way, were made of reed and aluminum, in designs of beautiful simplicity.

The under curtains in this living room were striking, being made of vivid rayon rep in a fantastic design by Ruth Reeves, called "Le Petit Déjeuner" which displayed all the elements of the morning meal in impressionistic disarray. The note of vermilion in the curtains was picked up here and there in the room, in the book bindings, the desk accessories, a cigarette box, an ash tray, and finally flowered in the decorations of the gay peasant china on the provincial dresser shelves.

All the accessories of the room were simple, but distinguished, and such as a man would enjoy having about him. There were well selected color reproductions of modern pictures on the walls, interesting pottery farm horses on either side of the mantelshelf, handsome brass andirons and fireset, a radio in a modern cabinet of beautiful design, an electric clock in a distinguished case of black and silver, and both floor and reading lamps with shades of unusual beauty. A desk equipment of pewter, as well as examples of it on the dresser added notes of sturdy simplicity, and were appropriate for a man's apartment.

The serving pantry was like the one in the two-room apartment in plan but somewhat larger in floor space so a dinette could be installed against the inside wall. This useful, collapsible piece of furniture is a practical modern invention which provides table space and two seats that may be closely folded up when not in use. The one in this apartment was made of walnut so it harmonized with the other furniture, and added practically another room since informal meals could be served on it without disturbing the living room. The containers for supplies and the enamel cooking equipment in this little kitchen were all brilliant vermilion, and the cream white china set was decorated with bright flowers and leaves.

Two single beds that disappeared into the wall when not in use formed the sleeping arrangements for the apartment, and were so ingeniously planned that panels slid back and forth back of them. When one or both of the beds was out in the room there was a neat paneled space behind—a vast improvement upon the type where there is always an open closet effect, or a door that projects into the room, and keeps air from the sleeper.

The red and black bathroom opened out of the hallway, and its rich color scheme was handsomely set off by the shower curtains of golden waterproof fabric, which matched the ensembles of towels, wash cloths, and bath mat. There was a man's set of brushes and comb in scarlet composition with a gorgeous Chinese seal design in black and gold upon them, and toilet bottles in bubbly green glass decorated in black and scarlet added to the luxurious equipment of this fortunate bachelor.

We are indebted for the furnishings and decorations in THE AMERICAN HOME model apartments illustrated on pages 497 and 498 to the following:

TWO-ROOM APARTMENT

LIVING ROOM: Paint on walls, trim, and ceiling, Du Pont Paint and Varnish Division; sheer rayon taffeta glass curtains, F. Schumacher & Co.; rayon shiki, Lord & Taylor; draperies made by workroom of Frederick Loeser & Company; mahogany furniture, Charak Furniture Company; china, glass, and linen Gimbel Brothers; cigarette holder, Mitteldorfer Straus, Importer; flat silver, The Gorham Co. SERVING PANTRY: Paint on walls Du Pont Paint and Varnish Division; all china, glass, and enamel dishes, Gimbel Brothers; Pom tongs, Mrs. Pom; dish towels, Cannon Mills, Inc.

PENT HOUSE APARTMENT

Paint on walls, trim, and ceiling from Du Pont Paint and Varnish Company; draperies of rayon crash, Andrew McLean; brown satin valances, etc., F. Schumacher & Co.; French provincial furniture Danby Furniture Company; china, quicksilver lamp and paper shade, kitchen enamel and china, Gimbel Brothers; desk accessories of pewter, blotting portfolio, wastebasket, pewter beaker, Mitteldorfer Straus, Importer; antique French provincial bureau, modern pottery vase, Frederick Loeser & Co., labor of making draperies, Frederick Loeser's workroom; pictures John Becker Galleries; pewter coffee set, Charak Furniture Company; flowers and plants, M. Goldfarb, Inc.; skyscraper bookcase, two Swedish chairs, Frederick Loeser & Co.; books Doubleday, Doran & Company, Inc.; fur rugs, modern pottery jars, pottery horse, Stern Brothers; modern armchairs, Ypsilanti Furniture Company; upholstery on armchair, rayon crash from Andrew McLean; brown rayon satin from F. Schumacher & Co.; glass and metal tables, floor lamp, and round lamp on bookcase, Kanne & Bessant; Radio case designed by G. Rohde; fireset, Edwin Jackson, Inc.

BATHROOM: Paint on walls, Du Pont Paint and Varnish Division; towel ensembles from Cannon Mills, Inc.; shower curtain, Barton's Bias Company; brush and comb, Du Pont Viscaloid; toilet bottles, Stern Brothers.



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The lure of the log cabin

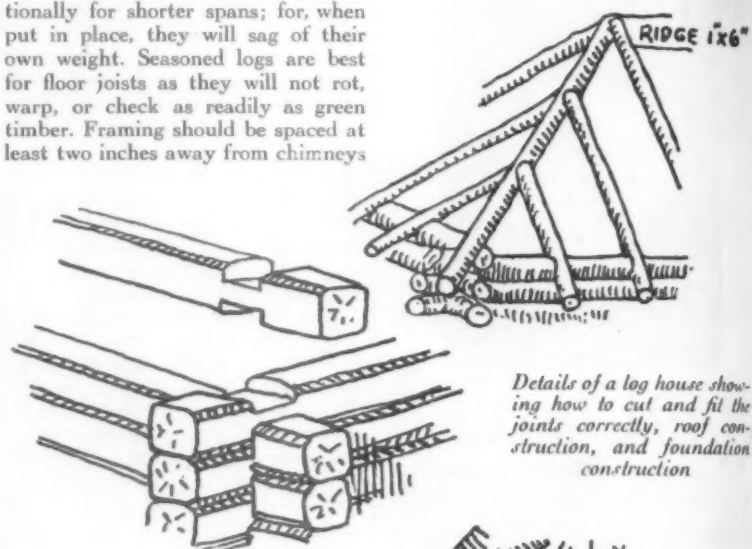
Continued from page 496

and doors is reached, the top log of these spaces is cut out and then the tier above is laid. This facilitates the future completion of that opening when it becomes necessary to saw the underlying logs. This can be done best by means of a two-man saw and a two by six inch plank nailed loosely to the face of the wall as a sawing guide.

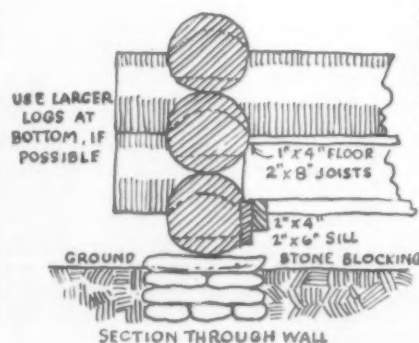
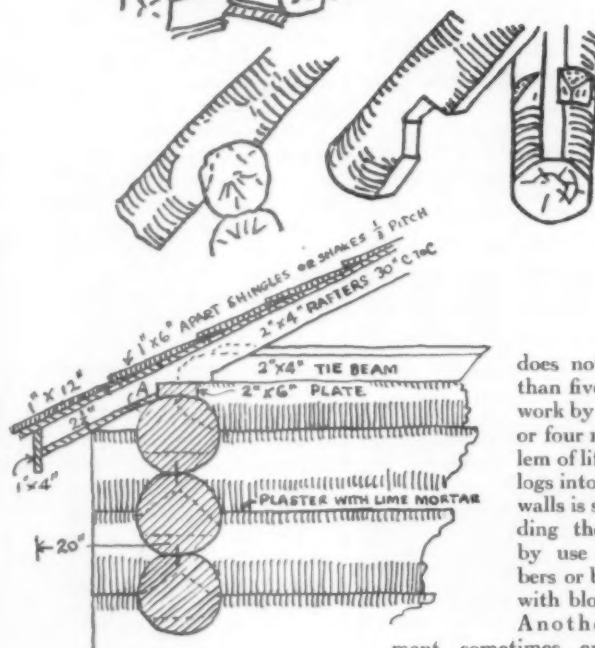
Where logs are used as joist, they should be six inches in diameter for twelve-foot spans or less, eight inches for sixteen-foot spans, and nine or ten inches for twenty-foot spans. In all instances, they should have one side flattened from end to end to provide an even surface for the attachment of the flooring. This face for twenty-foot spans should be crowned two inches in the center, and proportionally for shorter spans; for, when put in place, they will sag of their own weight. Seasoned logs are best for floor joists as they will not rot, warp, or check as readily as green timber. Framing should be spaced at least two inches away from chimneys

to prevent possible charring of the wood. Hand wrought cedar, spruce, hemlock, white pine, or cypress shingles are durable and blend well with the rustic architecture of the home built of logs. It is a wise practice to place a layer of fireproofing and insulating material between the roof boards and shingles.

It is sometimes said that log construction is a lost art, and that it is difficult to find skilled workmen experienced in the handling and cutting of logs. Anyone who is handy with an axe can soon learn how to notch and fit logs, or carpenters can be hired from the nearest timberlands. Wages for such workmen are low, and the log work on a large house such as is mentioned in this article



Details of a log house showing how to cut and fit the joints correctly, roof construction, and foundation construction



does not involve more than five or six week's work by a crew of three or four men. The problem of lifting the heavy logs into position in the walls is solved by skidding them into place by use of large timbers or by raising them with block and tackle.

Another discouragement sometimes experienced by prospective log cabin builders is in the matter of procuring the necessary logs. Lumber dealers are not used to orders for carload lots of rough logs, but when they get over their first surprise, they can generally place your order for you.

As in other forms of construction, the most satisfactory foundation for a log house is a masonry one of concrete, concrete blocks, stone, etc., with a basement, or an excavation, extending under the entire house. It is (Continued on page 524)



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Plant Iris now

Continued from page 502

After the plants are set out water thoroughly and in a few days cultivate the soil to prevent evaporation. Repeat this after each rain. Further watering will not be necessary except during a very dry season. Excessive moisture is injurious to Bearded Iris.

The Beardless Iris group consists of the very popular Siberian Iris, fine for cut flower and wonderfully effective in a landscape picture; the gorgeous large flat flowered Japanese Iris, which follow the Tall Bearded in bloom; the Spurias, which are somewhat like the bulbous Iris in form and also make fine cut flowers; and various "species" of wild Iris that are native to different parts of the world, together with their hybrids, many of which are quite handsome. All these Beardless Iris require similar treatment, which in many respects is just the reverse of that for Bearded Iris. Do not use bone meal for Beardless Iris on account of its lime content; well decayed manure, leaf mold and peat being best for them. Select a location where the ground is moist but well drained, give it a heavy application of well decayed manure, and set the plants about the same distance apart as the Bearded Iris, but planting them deeper, the crowns being about two inches below the surface of the ground. All Beardless Iris do best in full sun, but the Siberian Iris will also do well in partial shade. A fine but inexpensive collection of Siberian Iris will consist of Emperor, a fine deep violet-blue; Perry's Blue, a most popular and lovely soft blue, and Snow Queen, a fine large snow white of waxy texture. Two of the newer tall ones, growing fifty-four inches high, are Kingfisher Blue and Dragonfly.

The Oncocyclis and Regelia Irises, comparatively little-known types, require extra care and are well worth that. They must be grown in a coldframe, not for protection from the cold, as the rhizomes will stand the coldest weather, but in order to

give them a rest period after flowering. This is accomplished by closing down the frame after they are through flowering and withholding all moisture during the entire summer season, opening the frames again in October, giving them a thorough watering and allowing them to remain open until freezing weather sets in, when they should be covered with a light covering of leaves and the frames closed down for the winter. The covering is removed and the frames opened in the spring, after freezing weather has passed. If only a few plants are being grown, and a coldframe is not available, the same results can be accomplished by planting them in pots, burying the pots in the ground in October, covering the pots with leaves held in place by an ordinary wooden box in late fall, and removing the covering in the spring. Then after they are through flowering the pot and all can be taken up and put away to dry out and go into a dormant state; the pot being again buried in the ground in October.

The most interesting kinds in this section are susiana, which is unique in form and color, being covered with a network and peppering of brownish black on a grayish white ground; korolkowi, an interesting species from Turkestan, a black and white candy striped effect; and hoogiana, another native of Turkestan and a very lovely smooth uniform violet-blue color.

A section called Pogocyclis is the result of crosses between the tricky Oncocyclis type and the hardy Bearded Iris. The result is a race that is hardy outside, but with the peculiar markings and striped effects transmitted by their Oncocyclis parentage. They require the same treatment as the hardy Bearded Iris, but must have a sunny location for best results. They are among the most interesting of all the hardy garden types. A good collection of Pogocyclis Iris is Ib-Pall, Hamadan, Shiraz, Psyche, Nazarin, and Zwanenburg.

The lure of the log cabin

Continued from page 522

essential that the sill logs be protected from direct exposure to the ground, even though the log cabin be merely a hunting box.

In Dr. Jaffee's house the crevices between the logs on the inside of the house were covered with narrow strips of metal lath, nailed to the logs. The lath was then covered with a cement colored with burnt umber to match the tone of the cedar bark. All the apertures around doors and windows were thoroughly calked with oakum. Cotton waste or sphagnum moss also are useful for that purpose.

The interior decoration of a log house affords an opportunity for much ingenuity. There are few rules to be observed; the only object is to suit the style of the rooms to the rough, honest exterior which houses them. There is no reason why comfort should be sacrificed. There are numerous informal pieces of furniture which fit admirably in a log cabin and are very comfortable.

Log siding may, of course, be used for the interior of a log cabin, if the interior walls are cut smooth or if log siding is used on the exterior; or a particularly attractive interior can be developed from paneling, in which the grain and pattern of the wood is left exposed.

The house built by Mr. and Mrs. H. Carl Dann, of Orlando, Florida, as their country home at Mount Plymouth, a few miles distant, also shown in the illustrations accompanying this article, has a living room treatment much like that of its more northern relative. The living room is similar in design and shape. The mantel of the big stone fireplace is one slab of oiled cypress, rubbed slightly to emphasize the beautiful color and grain. The ceiling is unfinished and is two stories high, with sapling rafters and massive cross beam poles left exposed. At one end of the large room is an old-fashioned loft reached by a rustic stairway.

Dog kennel with partition. Walls and roof of cedar. Hard pine floor. Price \$22.



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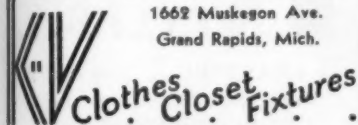
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When the soil's too wet

Continued from page 504

that is walls laid up without mortar, will elevate a garden or border sufficiently to provide efficient drainage and can be put into shape for planting in a very short time. In addition, the rock work forms the basis of a decorative treatment that may prove the most popular part of the garden.

We often read the advice to plant in a "moist, well drained" situation. That is imported advice—England the source where they can have moist drainage because of a moister climate. There is no such thing as a moist, well-drained situation over vast stretches of the U. S. A. for during the hot months, particularly from July to mid September, we are bound to have a dry spell when any well-drained place, no matter how well supplied with humus content in the soil, will become dry and when humus becomes dry, there is nothing drier.

But with good drainage, we can water to advantage knowing that we will not make the soil soggy and unhealthy for the plants and that the humus once soaked up can be readily replenished with moisture from time to time by judicious use of the hose.

The cult of the Iris has brought the subject of proper drainage importantly to the front, particularly concerning the Tall Bearded Irises for which good drainage is culturally a necessity. This is particularly true of the finer new varieties which owe their origin to Asiatic species such as mesopotamica, ricardi, trojana, and cypriana. The result has been a wholesale elevation of beds and holding the new level in place with rocks has been the most convenient method. By this means gardens in which the Irises were badly afflicted with rhizome rot, and heart breaking losses of expensive Irises followed, have been made habitable for the Irises. While the conditions were being ameliorated for the Irises it was discovered that there was a general improvement in the health of other plants.

The Iris pioneers who built up their beds and gardens to get the needed drainage have found many emulators so that beds with rock borders are becoming more and more common. With the low, dry wall laid up in soil to hold the new level, the next move

invariably has been the installation of rock plants between the stones and a new beauty appeared in the garden. So with a small rock garden as a boundary, the Iris garden flourished above it and often the small wall with its rock plants has proved a strong competitor in interest.

The little rock wall will develop an interest in the plant itself which, after all, is the true interest in gardening.

The garden in the illustration (on page 504) was raised and rocked to accommodate a fine collection of Irises which languished and rotted on the flat surface of the premises. Many valuable plants were lost despite all preventive measures. Since elevation, they thrive and are healthy.

With the elevation, a number of other plants showed surprising gains. Delphiniums spired to new glories. The Candelabra Primroses which rotted in winter took kindly to the new drainage. Pyrethrums outdid themselves. Gaillardias which had proved a failure before the elevation once more became flourishing.

The rock used was limestone, the cheapest material available and on flat terrain the most appropriate and giving the best effect. It is also the easiest to handle. Boulders and tufa rock are also used but the latter is expensive and boulders never seem to belong anywhere except on hillsides. The limestone with its horizontal lines is much more in keeping with the surroundings.

The laying of the wall after the soil has been dumped on the side is a simple task. The only precautions to be taken are to see that the foundation rocks are given a downward and inward slant and that the succeeding tiers are battered sufficiently to make them solid. A foot of stone work is ample and sometimes even less than that will work wonders in the way of providing much needed drainage.

In the little wall about the garden illustrated which is fifty feet long, a wide variety of rock plants has taken hold and flourished. They include creeping Phloxes, Sedums, creeping Veronicas, Cerastium, Arenaria, Primulas, a variety of alpine Pinks, Dwarf Irises, and Sempervivums.



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The long and short of evergreens

Continued from page 505

is advertised at a dollar for two-foot specimens and may be purchased as low as \$9.00 a hundred in twelve- to fifteen-inch sizes. Like conditions exist with Firs and with Junipers to a certain extent.

With so much of the permanence of an evergreen planting depending upon the varieties used, it is important that you study carefully into what desirable varieties may be had at prices within your price limits.

Among the large families of Yews, Junipers, Japan Cypress, and Arborvitae there is a varied selection of forms and types to meet the needs of almost any planting and in addition there is the great class of broad-leaved evergreens which have much

to recommend them. Physical limitations must be observed if you would have your planting grow properly over a long time. Soil and drainage conditions are important and with the broad-leaved kinds, the soil reaction must be acid. Sunlight and shade are vital factors also, as a variety naturally thriving in a sunny open position will soon perish in the shade. Atmospheric conditions are also important, some kinds will not succeed in sections where smoke, oil, and dust permeate the air. Exposure, rainfall, and other climatic conditions are frequently limiting factors also. Many Arborvitae and the Retinosporas are subject to burning if planted on the (Continued on page 535)



SHOP WINDOWS OF MAYFAIR

BY SHIRLEY PAINE



Beginning with this issue we shall give the name and address of the shop from which each item has been selected for the Shop Windows of Mayfair section. This will enable readers to place their orders direct, and we believe it will increase the speed and convenience with which orders can be handled. In order to avoid delay, kindly enclose check or money order when ordering direct from the shops.

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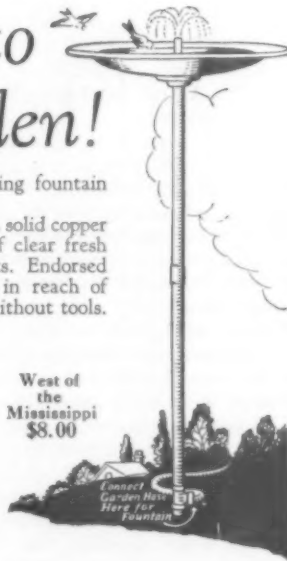
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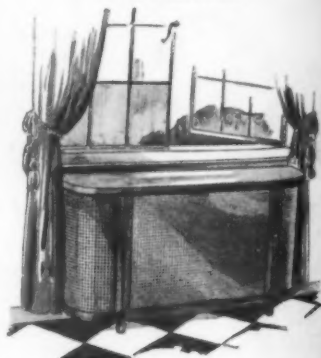
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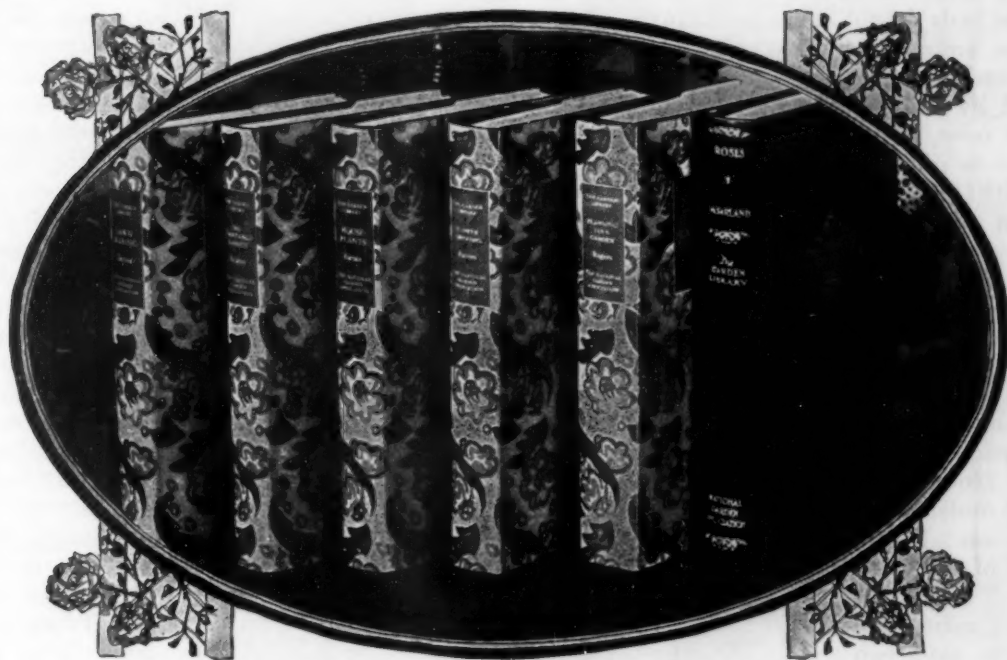


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In and About the Garden



[[*Edward Burpee*]]

AN INTERESTING question has arisen. Are any plants distinctly repellent to cats? I know of none. Cats and flower beds do not combine very well under ordinary circumstances. If it were possible to deter the intruding quadruped by using a plant that had a repellent odor, it would be interesting and might be useful. We are perfectly familiar with the reverse situation—that certain plants are definitely attractive to cats. Catnip is notorious. Even the refined garden type, *Nepeta mussini*, as I found by experience. I was a long time in finding out why the neighborhood cats developed such an affection for my small rockery until I saw one apparently rubbing his head in the ground. Examination showed a rootstock of the Mussin Catnip was at that exact spot. Removal of the plant brought a cure!

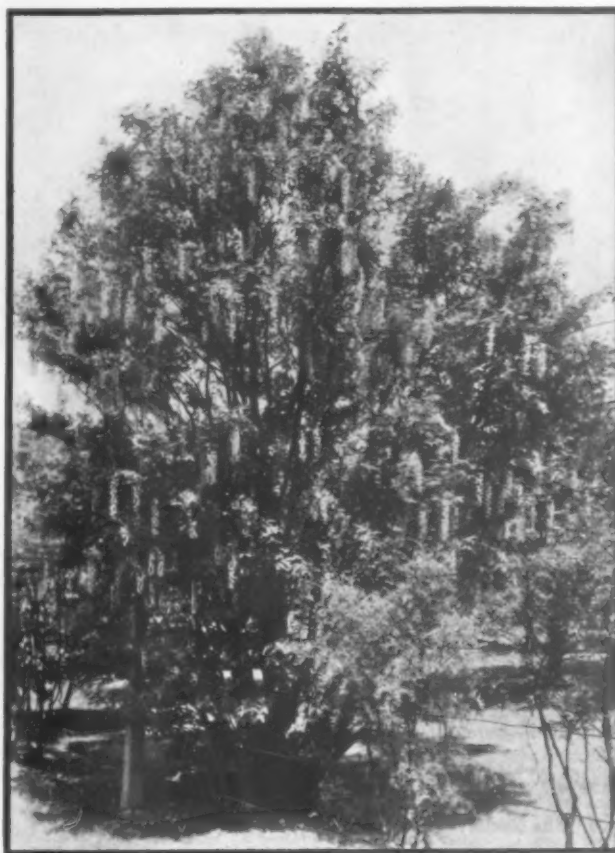
Another plant that must often be excluded from the suburban gardens, despite its other attractive qualities, is the woody climbing vine *Actinidia polygama*. I am not sure just why the cats like this vine—whether it has a flavor that they like or whether it is because it meets their need for muscular exercise only. The cats love to claw the climbing stems which they leave badly scarred. At all events, it succeeded all too well as a neighborhood attraction. The allied species, *A. arguta*, seems to lack this cat-attractiveness, and is therefore preferable for garden planting.

AMERICA IS NOT ENGLAND

THE enthusiastic worship of English gardens that seems to be the assured reaction of the American tourist, who in consequence returns fired with the ambition to make an American garden in the English pattern, is too often founded on an inadequate study of realities and lack of analysis of the existing conditions on the two sides of the Atlantic. American gardens cannot be made by reproduction of the English style and materials. It should be obvious, and must be in fact, to anyone who pauses to give the matter any real thought. The climatic differences between the two countries are really very great and it is largely nothing but climatic differences that account for the natural distribution of plants. There are a few other minor

considerations, such as soil make-up involved in particular cases, but generally climate is the determining factor.

Climate is not the same thing as weather. The English climate differs radically from the climate of the Eastern United States. The effort to transport the English garden into this region or to reproduce the English garden in materials and actual detail is to court failure and inevitably leads to disappointment.



Goldchain or Goldenrain is an apt name for the Laburnum tree with its yellow wisteria-like flowers. The hybrid (L. watereri) has racemes longer and more profuse than the common shown above

The farther we can get away from the thought that a good garden anywhere and everywhere in America must necessarily be a slavish copy of an English garden in England, the better off we will be. On the northern Pacific slope western European climate is nearly matched, and English garden material there finds a congenial condition through the ambient moisture. Tremendous progress in the last few years has been made in other sections of our land by an understanding of this fundamental fact.

The vine-covered cottage with the Roses clambering up the wall and abundance of flowering plants nestling in narrow borders at the base of the walls

of the English houses makes a pretty enough picture indeed! But, try to reproduce the same thing here, except on the West coast, and your troubles begin. The accumulated day degree of heat is to be considered. In England the wall actually serves as a protection and shelter to the plants nestling close up against it because of the climatic conditions. The plants like the added warmth and perhaps even the dryness they thus get,

whereas in our hotter, drier condition the radiated heat takes a fearful toll from the plant's vitality, and makes a most congenial habitation for red spider. Dosing with water—the most reasonable remedy—is neither an easy nor always a practical one. We must realize the limitations and fit our plantings, and even the design, accordingly.

Those in the East must gird themselves against temptation and, if they would copy at all, must copy from the dry continental plains of Central Asia. The determining factor seems to be the average mean range of rainfall.

American visitors to England in the springtime greatly miss the Flowering Dogwood which is cited as just one illustration of the differences in conditions. Notwithstanding numerous efforts and introduction to English gardens, our Dogwood simply will not thrive over there. It lives, eeking out a most precarious kind of existence but its bracts never take on the glistening purity that gives so much of the spring landscape such distinction with us. On the other hand, the English have their Hawthorn which, while performing better here than the Dogwood

does over there, is still far off from its native beauty. The Laburnum, by the way, is another illustration. Speaking of Laburnum, I must again say a good word for the superior form known as *watereri* or *vossi*. It has extraordinarily long racemes of pure yellow wisteria-like bloom and is more at home than the ordinary form. This plant is said to be a hybrid of the Common and the Alpine or Scotch Laburnums. It is a fairly old plant, but seemingly not so well known as its qualities would seem to merit. Perhaps the fact that the Laburnum is incapable of repairing any bark injury is a handicap to its greater popularity in nurseries, but none the less I commend it to you. (Continued on page 541)



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NOTE—these are all top size, first quality bulbs in collections of named varieties—not mixed. Plant each variety separately and learn to appreciate its individual charm and beauty. (Collections in units of 100 only—our selection of varieties.)

100 Single Early Tulips in 10 named varieties.....	\$6.00
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200 of these lovely Spring beauties—25 each of 8 named varieties for **\$6.50**

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"Tulipdom" May, 1930

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Garden Reminders

ANNUALS will bloom in abundance this month. Don't be afraid to cut the blossoms. The old axiom is true—the more you cut, the more you will have.

North

The Flower Garden. Cut flowers continually, lest they go to seed. Keep vases filled with blossoms from the garden, cutting the blooms as buds begin to open, and in the morning or after sundown. Use sharp knife, and plunge stems into water.

Transplant perennials sown in May toward the end of this month. Sow other perennials in coldframe.

Divide Primroses, Pyrethrum and Poppies. Plant Madonna Lilies. Spray Chrysanthemums, Dahlias, and Hydrangeas with liquid manure. Sow Pansies, Bellis, Forget-me-nots. Disbud Dahlias.

Use sheep manure for Phlox, and bone meal for Roses.

Cut back Goldenglow.

Select bulbs for indoor forcing and fall planting.

Take cuttings of bedding plants. Also Poinsettias.

Separate Iris and start new plants outdoors.

Make a new sowing of annuals early this month for another crop of blossoms on early varieties before frost.

The Vegetable Garden. Seed of short season vegetables, such as peas, bush beans, spinach, corn salad, cucumbers, radishes, turnips, lettuce and kale, may be started again. Foliage of late-planted Tomatoes must be thinned out.

Pinch back lima and pole beans when they grow too tall.

Spray Cabbage with arsenate of lead to get rid of slugs. Keep soil well tilled.

Bone meal should be applied to the asparagus bed.

Sow parsley for spring use. Put old plants in frame.

Blanch early celery; blanch endive, and transplant.

Don't let parsnips, Swiss chard, and other vegetables which are to stay in the ground get tough. Apply quick fertilizer as top dressing.

Harvest onions. Let sun dry them, then store in cool place.

Miscellaneous. Let sun stream on Grapes by removing leaves from vines here and there.

Remove old Raspberry and Blackberry shoots.

Bud Cherries and Peaches.

Prune shade trees, cutting cleanly.

Clip hedges for the last time.

Bud Roses and Lilacs.

Prepare for fall moving of large trees by pruning roots.

Spray for codling moth.

Mulch with grass clippings to prevent roots of plants from drying.

Order evergreens for delivery the middle of the month.

Mow lawn regularly even if it is dry. Don't let weeds crop in. Start new lawns. Repair bare spots.

Look over material for coldframes. Don't let fruits stand on trees until too ripe. Prevent bruising by picking some before they ripen well.

Use bordeaux mixture on peach trees after picking fruit.

Layer tips of Black Raspberries.

South

The Flower Garden. This month, plan and plant for your winter garden. Sow Christmas Sweet-peas in a sunny spot, in a deep trench.

Remove all early annuals that have finished blooming, spade the soil deeply, and fertilize.

Use leaf mold around Hydrangeas, Ferns, Lilies; mulch with leaves.

Use cow manure on Roses and other shrubs, and perennials; or, if you use commercial fertilizer, only half the dose for spring weather.

Continue to pinch back Chrysanthemums, Dahlias, and Poinsettia; tie and stake when necessary.

In the Upper South, plant Liliun candidum (Madonna Lily); in the Far South Liliun longiflorum (Easter Lily) will succeed better, and can be planted now or later.

Pot up any cuttings, and clean out the cutting-boxes; in fresh sand start cuttings of Camellia, Hibiscus, Carnation, Jasmine, Althea, Rose, Begonia, Calamintha, Coleus. Iris may be divided and reset; also Oriental Poppies and Pyrethrum.

Repot Oxalis and Cyclamen late this month.

As seeds of perennials ripen, sow in boxes or beds.

Sow in the open only such heat-loving annuals as Portulaca, Balsam, Cockscomb, Amaranth, Zinnia.

Don't let Marigolds, Gaillardias, and other annuals go to seed.

Gather Everlastings for bouquets.

The Vegetable Garden. Stake all Tomatoes not yet done.

Sow Turnips, Mustard, Swiss Chard; Bush Beans; White, Black-eyed, and Marrowfat Peas; Cabbage, Cauliflower, Broccoli, Brussels-sprouts, Kale, Parsley, Roquette and Chervil.

Keep soil moist by covering with brush where Parsley has been planted.

Shallots and Onion sets may be put out. If the weather is moist and cool, Lettuce, Endive, Beets, Celery, and Radishes may be sown.

Miscellaneous. Fertilize evergreens. Hoe or mulch to prevent caking after rains.

Keep down the weeds, and do not let them seed.

Use arsenate of lead for cutworms; nicotine sulphate or tobacco dust for plant lice.

The West Coast

Remove all spent blossoms; but keep the best for seeds.

Continue sowing seeds of perennials. Divide and replant Iris cretensis (stylosa), in a sunny, protected situation.

Water and disbud the Chrysanthemums and cut back the Dahlias for a second blooming.

At the end of August, begin irrigating the rose beds, cultivating afterwards. Make Rose cuttings.

Continue planting Freesias, Watsonias, Callas and Liliun candidum. Fern beds may be replanted now, in moist soil, lightened with leaf mold.

Plant Schizanthus, Chinese Primroses and Roman Hyacinths in pots for winter house blooming.

Plant Japanese Iris now in rich limeless soil in moist location.

Insect extermination

I. GEORGE QUINT

APPLE

Scale, plant lice—M. G. K. Evergreen, Sunoco, Scalecide, Lime-sulphur, Kerosene miscible oil
Red mite, apple scab—Lime-sulphur, Sulfocide
Codlin moth—Lead arsenate
Plum curculio—Lead arsenate
Apple maggot—Lead arsenate
Leaf-eating worms—Lead arsenate, Bordeaux mixture

PEAR, QUINCE

Psylla—Lime sulphur
Eggs, nymphs—Black Leaf 40
Scale, scab, codlin moth—Lead arsenate, Sunoco, Lime-sulphur, Scalecide

PEACH

Scale, leaf curl—Lime-sulphur
Curculio—Lead arsenate
Brown rot, scab—Lime-sulphur
Borer—Paracide

PLUM

Scale—Lime-sulphur
Curculio, brown rot—Bordeaux mixture, Lime sulphur

CHERRY

Scale—Lime sulphur
Worms, caterpillars—Lead arsenate, Bordeaux mixture, M. G. K. Evergreen

Borers—Borowax

Leaf spot—Bordeaux mixture

WITH THE BERRIES

BLACKBERRY, CURRANT, GOOSEBERRY, RASPBERRY
Worms, slugs, beetles—Lead Arsenate (Slug Shot if fruiting)
Red spider—Nicoteen, Imp Soap Spray, Derrisol
Mildew—Ammoniated copper solution, Fungtrogen

STRAWBERRY

Leaf spot, blight—Bordeaux mixture
Leaf roller—Hellebore if fruiting
Lead arsenate later
Beetle—Lead arsenate

IN THE VINEYARD

GRAPE

Beetle, caterpillar, slug—Lead arsenate, Hellebore
Leaf hopper—Aphine, Nicoteen, Evergreen, Black Leaf 40
Root lice, grubs—Aphine, Nicoteen
Blackrot, mildew — Fungtrogen, Bordeaux mixture, Fungine, Ammoniated copper solution
Rose chafer—Evergreen
Berry moth—Lead arsenate

The long and short of evergreens

Continued from page 527

south side of a building, where the sun beats down upon them, especially when up close to a wall which reflects additional heat. For partially shaded locations Japanese and (not in the North) English Yew, Hemlock, some of the Arborvitae and many of the broad-leaved evergreens (Rhododendron, Andromeda, Leucothoe, Bayberry, and other things) may be used to good advantage. Most of the Junipers do best in full sunlight as also do the Evergreen Rocksprays (Cotoneaster), the valuable group of dwarf evergreen shrubs. Some of the species are not entirely evergreen in the more severe sections of the country but wherever they are so, their value will be appreciated more and more as they are better known. Avoid planting Pyramidal Arborvitae, Golden Retinospora, and most of the Junipers in shaded places.

For moist places the Retinosporas, (Chamaecyparis is the accepted term in Standardized Plant Names) seem to be highly recommended as are also some of the Arborvitae, notably Ellwanger's and the Chinese Arborvitae. The Yews, most of them liking shade, do not resent moisture; but nearly all evergreens insist upon reasonably good drainage. For an evergreen that will thrive under a wide variety of conditions and exposure, Canada Hemlock (Tsuga canadensis) has much to recommend it. Being naturally a rather slow growing evergreen, it will in addition stand severe pruning and in this way its growth may be restrained and it is useful where normally it could not be planted. By many the Canada Hemlock is considered the most beautiful evergreen

of North America. The Carolina Hemlock, from the South, is perhaps more feathery in effect and is hardy North, even to Massachusetts.

In planting a group of Evergreens, not only must the purpose be considered, but the various forms and types must combine prettily. Do not mix too many varieties. Better that a group of twenty-five members be confined to four or five kinds than that a dozen be used. A garden planting should not be a botanical display and choice varieties are only choice as they lend perfection to the group as a whole. Garish, highly colored varieties are out of place in limited areas.

Foundation plantings seem to be the place where the most glaring mistakes are made. As a general rule only comparatively dwarf varieties should be used. And they must be kinds that will stay dwarf. But I hear some one say, "Yes the dwarf kinds are very nice but full grown specimens of them are costly and the younger and smaller sizes if planted to allow for future development look lost in the areas." This is very true and you have two courses open. Groups may be made up of the more permanent, slow growing varieties, planted in their rightful places and then fillers planted of other very much less expensive stuff that can be removed as occasion calls to be used in some other development around the place.

The other plan calls for the planting of the smaller sizes close enough together to look fairly well, allowing sufficient room for the development that will take place in a couple of years and then reset them at the end of that time.

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"The World's Finest Irises" are here offered at **considerably less than my catalogue prices, in some cases less than half price**, and lower than such choice varieties have ever been sold for before. These special prices apply only on orders received this month and next, in direct response to this ad., which will not appear again. All these varieties are of recent origin and many of them have recently sold as high as \$50. and \$75. a root. This is a rare opportunity for Commercial Growers, as well as private estates and individual home owners to secure a high class collection of Hardy Garden Irises at a fraction of their real worth. Each plant is carefully labeled and all are guaranteed true to name.

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In the June and July issues of this magazine, I advertised the "Prizewinner COLLECTION" of

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You'll be interested in referring back to one of these issues and reading the descriptions of these beauties.

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Evergreen—Dept. 48 Easton, Pa.

Who owns your shade trees?

Continued from page 503

or property rights, of which an abutter cannot be unlawfully deprived. . . .

"While the cases involving such rights relate, mainly, to questions of ingress and egress, light and air, and lateral support, neither logic nor sound legal principle exclude the recognition of other rights equally valuable to an abutting owner. Why allow damages for the obstruction of light and air, and not for the destruction of ornamental shade trees?"

"Such trees are a part of the street, to be used and enjoyed by the traveling public the same as a good roadbed, sidewalk, pavement, or anything else in the street which contributes to the comfort or the pleasure of the traveler; and, generally speaking, whatever renders a street more valuable to the people at large renders it more valuable to an abutting owner, since, as already seen, he has all their rights besides others peculiar to himself. . . . We hold, therefore, that plaintiff had a property right in the trees in question sufficient to enable her to maintain this action. . . . Judgment affirmed." (142 A. 72)

The foregoing case was carefully reasoned by the court, and its holding is in accord with the great weight of authority on the question involved. As, for example, in New York a property owner brought an action for damages to shade trees in the street abutting his property, caused by the negligence of a gas company in allowing gas to escape which destroyed the trees. In sustaining a judgment in favor of the property owner the court, in part, said:

"If the street is improved so as to be more useful, or ornamented so as to be more beautiful, the public is benefited generally, and the abutter is benefited specially. So long as a . . . shade tree is physically and legally a part of the street, he is entitled to all the special benefits which flow therefrom to his lot, free from interference by a wrongdoer, but subject to removal by the municipal government.

"The easement extends to all parts of the street which enlarge the use and increase the value of the adjacent lot. It is not limited to light, air, and access but includes all the advantages which spring from the situation of the abutter's land upon the open space of the street. These rights exist whether he owns the fee of the street or not. As they are dependent upon the street, and cannot exist without it, they are a part of it, and thus become 'an integral part of the estate' of the abutting owner, subject to interference by no one except the representatives of the public. . . ." (73 N. E. 1108)

MUTILATION OF TREES

Both on reason and authority, the foregoing holdings in respect to the right of abutting owners to damages for the destruction of shade trees apply to their wanton or careless mutilation. In other words, a reckless or unnecessary lopping of shade trees may give the abutting owner the same, or just as valid right to damages as their complete destruction.

In addition, the mere fact that a person or corporation has the legal right to "trim" trees may not excuse for damage caused by the negligent exercise of such right. The law is quite clear that even a right of this kind must be exercised with due regard for the interest an abutting owner has in the trees. For example:

In a well reasoned Oklahoma case, a public service corporation was engaged in operating electric current wires under a city ordinance. This ordinance set out in detail the rights acquired by the corporation, and contained the following provision in respect to the right to trim trees that might interfere with the wires:

"And shall have the right to trim trees to prevent branches from coming in contact with wires and to remove such trees when necessary for the proper placement and maintenance of same."

Pursuant to this ordinance, the corporation strung its wires along a certain street, and these wires passed over certain young black locust trees which the plaintiff had planted in front of her residence. Six years later the branches of these trees reached the wires, and the corporation sent a crew to trim them back as is frequently done in cases of this kind.

The men lopped off the tops of a number of the trees without any regard for, or the protection of the exposed ends. In fact, from the report, it is clear that the trimming was done without any consideration for the beauty or future of the trees. Also, it appears that there was no necessity for the drastic slashing that was indulged in, and which consisted in cutting off from ten to twelve feet of the trees.

Plaintiff, as the abutting property owner, filed suit for the damage to the trees. The corporation set up its right granted by the ordinance to trim the trees, and took the position that it had not exceeded its authority. The trial court rendered judgment in favor of the plaintiff. The corporation appealed, and the higher court in affirming the judgment reasoned, in part, as follows:

CORPORATION HELD LIABLE

"As stated in . . . 142 N. W. 807, decided by the supreme court of Minnesota: 'Both the company and the landowner may be in lawful occupancy of the street. The abstract right of neither may be said to be superior, and each must be regarded of the rule that property rights must be so exercised as not unnecessarily to impinge upon, interfere with, or impede those of another.'

"In such case, mutual and reasonable accommodation is due from each to the other; and slight injury to trees by necessary and reasonable trimming cannot be made the predicate of an action where the wires are rightfully in position and their owner has not voluntarily, or to any considerable extent, invaded space first actually or potentially occupied by the special owner of trees growing on the street when the wires were strung. . . .

"The defendant (corporation) violated the rule (Continued on page 537)

What you ought to know about Perennials

I. GEORGE QUINT

THE ever changing scene in the perennial garden, where one color gives way to another as one specimen follows another into bloom, is one of the joys which make such a garden desirable. Few Perennials bloom all season, and for that reason there should be a judicious selection and arrangement of varieties to assure an all-season change of color.

The following questions will arise as seeds are sown now for next year's bloom:

1. *What are the fundamentals of success in growing Perennials from seed?*

Deep, thoroughly worked soil, mixed with bone meal. Weekly spraying with bordeaux mixture and occasional spraying with arsenate of lead for leaf-chewing insects and nicotine sulphate for sucking insects. Frequent cultivation of the soil between plants. Transplanting when plants are crowded. Protection through the winter.

2. *Can you suggest how plants should be arranged for good effect?*

Select varieties which are adapted to the space you have, with regard to sun or shade. Put tallest varieties at the back of the border, being careful to use varieties which have a quantity of foliage for background. Some of these tall varieties may go also in the wide sections of the border near the front. Plants which grow compactly should go in the front, for edging. Plants which flower profusely should be selected, with a few unusual sorts planted among them for experimental purposes. Plant for harmony of colors.

3. *Will Perennials grow in the shade?*
Almost every sort of blossoming plant requires some sunshine, but some Perennials which will do well in the shade are: Japanese Anemone, Forget-me-not, Foxglove, Plantainlily, Pansy, Japanese Balloon-flower, Bleeding-heart, Cardinal-flower, Columbine, Ferns, Bee Balm, Lily-of-the-valley, Monkshood, Moss Phlox, Virginia Bluebell, Sedum, Gout-weed, Buglos.

4. *Will all Perennials live outdoors over the winter?*

Some are rather tender and should be removed from the ground and wintered in a coldframe. Among them are the Foxglove, Shasta Daisy, early Chrysanthemum, Bluebeard, Mealycup Sage, Gentian, Sage, Torchlily, Gloxinia, Pentstemon, Incarvillea, and Meadowrue. Others may be put in the hardy class and kept outdoors through the winter by placing branches of shrubs or trees over the beds after the first severe frost, and then scattering some leaves over the branches.

5. *Can all Perennials be grown from seed?*

All but a few can be successfully raised in this way. In the case of Peonies, Iris and Phlox, however, it is best to buy roots of established plants, as these have been hybridized so often that seeds will produce colors which may be undesirable.

6. *If seeds are planted in late summer, will all Perennials blossom next year?*

No. There are a few kinds which will not bloom for several years after seeds are sown. They include the Adonis, Globeflower, Gasplant, Wild Indigo, Monkshood, and Christmas-rose.

7. *What Perennials make good cut flowers?*

The best include the Chrysanthemum, Delphinium, Iris, Oriental Poppy, Peony, Japanese Anemone, Phlox, and Torchlily.

8. *I have space for only a dozen kinds. Which do you suggest?*

Asters, English Daisy, Hardy Alyssum, Pansy, Oriental Poppy, Forget-me-not, Larkspur, Foxglove, Columbine, Chrysanthemum, Goatsbeard, and Monkshood. These from seed. And I should certainly want some Iris, Peony, and Phlox, to be grown later from roots. This list is purely a matter of taste, and might easily be changed to suit the individual. It is merely a list of the old stand-bys I like best.

NEXT MONTH—"Peony Planting."

Who owns your shade trees?

Continued from page 556

of 'mutual accommodation' . . . And the said ordinance of the city purporting to authorize defendant to trim trees would not justify the trimmings, nor constitute a defense against the recovery of actual damages given. . . . The judgment . . . should be affirmed." (139 Pac. 830).

CONCLUSION

In the light of the facts and holdings of the foregoing decisions, it is obvious that, generally speaking, an abutting property owner has a tangible property right in street and highway shade trees, regardless of whether or not he owns the fee in street or highway. Further, while

such right is always subject to the right of a municipality to remove or destroy such trees in the interests of the public, even such right must be exercised according to law, and cannot be based upon the mere arbitrary will of an official.

So to, while a public service corporation may be authorized to trim or destroy trees, where public necessity requires, yet, even granting such authority, it must be exercised with due regard for the rights of abutting owners or liability may accrue. And, in respect to wrongdoers, their injury to or destruction of shade trees will usually give the abutting owner ample ground to support an action for damages.

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Your next year's strawberries

Continued from page 506

expect the following year. This applies even more to a bed a year old or older than to young plants.

For fertilizers the amateurs may as well follow the commercial men. Many of them use tankage or bone meal as sources of phosphorus, and dried blood as a supplier of nitrogen because they may be scattered broadcast without danger of burning the foliage. Half a pound of dried blood and two to three of tankage to 100 square feet are liberal dressings for strawberry beds.

The amateur can give each individual plant in a small bed all the attention it deserves as a producer of choice fruit. When you dig it in your old bed you can take it up more carefully than a commercial grower ever does. Thus you can save a far larger amount of root. You can drop it at once into a pailful of water. You can plant it exactly right, with its crown even with the soil surface—not so high that it dries out and dies or so low that it smothers and decays the way millions of machine-set plants die every year. You can make a little saucer-like basin around each plant to fill with water as each one is set and as often again as necessary if the weather continues hot and dry. You can spread and work in the fertilizer around each plant by hand with a finger shaped weeder. In short, you can give each plant a personally conducted tour from babyhood to maturity.

But suppose we don't happen to have a strawberry bed to get runner plants from! The specialist growers of strawberry plants don't like to dig plants during summer, but many seedsmen and nurserymen sell potted plants and the great majority of the varieties so offered are of high quality—distinctly amateur home garden kinds. Of course you have to pay high prices for such plants, but to make a start and to insure having fruit next summer instead of waiting a whole year longer for spring set plants to start they are worth their extra cost.

Commercial growers cannot afford to use such plants. They cost too much in time to develop and to set on a large scale, to say nothing of the cost of pots. But what are time and a few flower pots to the amateur gardener? There is no question that for August and September planting properly grown potted plants that have not become pot bound are more likely to succeed than are plants merely dug up and transplanted. Their roots are contained in the pots and are therefore set complete, whereas dug plants suffer more or less loss. It is no trick to grow your own potted plants. Plunge 3-inch or 4-inch flower pots rim deep in your strawberry bed, fill with earth, place a runner on each, holding it in place with a pebble or a lump of soil. In three or four weeks it will have made enough roots to be transplanted. Several hours before you plan to transplant soak the plants with water. After the muddiness has disappeared, preferably towards evening, do the planting. Dig a shallow hole with a trowel and set a pot in it rim deep. Remove the pot and make sure that the bottom of the hole is firm and flat so that when the ball of roots is

set in place there will not be a pocket of air to dry out the roots.

Knock the plant out of the pot, immediately place it in the hole, press the earth firmly around it, taking care not to break the ball of roots, make the saucer-like hollow for water, fill it with water, and go on to the next plant. Potted plants so treated will at once take hold and do well, though if the weather and the soil continue to be very dry they may need soakings at intervals of a week until autumn rains make the grass grow well in the neighborhood.

Strawberry plants winter well when properly protected by a mulch. My preference among materials would be for buckwheat hulls among the plants and, if I could get it, buckwheat straw over the whole bed. The hulls settle down better than anything else I know, though I think granulated peat moss would answer too. Rotten sawdust and oat chaff make nearly as good mulches. All of these materials have the supplemental advantage of being free from weed seed, low priced, and checking evaporation during the summer as well as preventing heaving by frost during winter. They are also capable of adding humus to the soil when they decay which they do readily because of their close contact with the ground.

Corn stalks, tomato vines, and other coarse materials are fair makeshifts because they catch and hold fallen leaves which would otherwise blow away. Leaves alone pack too densely to be good for mulches.

Manure, especially that made from baled hay and straw, is the worst possible material because it is full of seeds—hardy perennials such as grass, daisy, wild carrot, and plantain.

Grow high quality kinds exclusively; kinds that individually have a long season of ripening—a week to three weeks; kinds that ripen successively from earliest to latest. Out of several hundred varieties that I have tested my first choice would be for Premier (also known as Howard No. 17). The plants are exceptionally sturdy. To follow it the best I have grown is Joe Johnson (more familiarly known as Big Joe, Chesapeake would be my choice for a late variety, though William Belt and Big Late are excellent. As to Everbearing Varieties, unless I had a bed or had some friendly neighbor who would let me have plants, either runner or potted, I would wait until spring to start a bed because these varieties normally bear the same season as planted and should have their blossoms picked off until late June so as to make them bear more profusely during late summer and autumn.

Progressive (also called Champion) is doubtless the best flavored, most prolific, and adaptable for home use; Mastodon bears larger berries, but it is not of quite such high quality. It is the nearest approach to a business variety among the everbearing strawberries.

Don't be governed by the distances recommended for commercial planting. You will use either a wheelhoe or a hand hoe so set the plants any distance apart that suits you, though not less than six inches in the rows.

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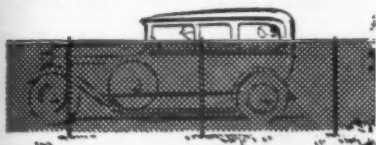
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All the beauty of natural flagstones is found in these hand-made slabs of concrete

Man-made flagstones

JAMES E. FOSTER

A FEW years ago no one would think of building a flagstone walk unless a supply of these large, flat stones was near at hand. To-day, however, the home owner is not so dependent upon the bounties of Nature. If flagstones are not available, he makes his own. Even if a natural supply may be secured, he frequently will cast his own "stones" of concrete, since in this way he can secure sizes and shapes which Nature may not supply.

Before a flagstone walk is built, a plan of it is drawn. In this plan each stone is shown and its size is determined. The home owner is thus able to calculate the number of stones of each size he will require.

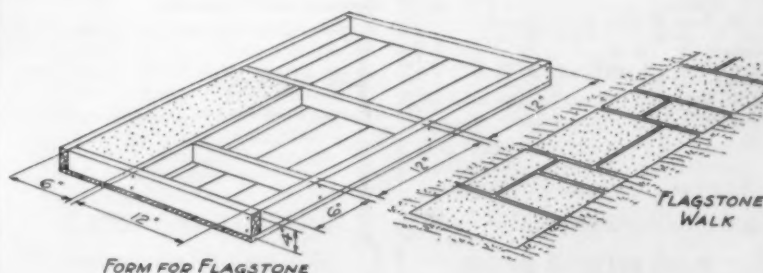
Forms for the stones are made of 2 x 4's, nailed together to form a piece of framework having a thickness of four inches. The individual forms can be made to vary in size and shape. As a form is essentially an area surrounded by three or more 2 x 4's, one board can serve as a boundary for two forms and several forms can be built into a single piece of framework, if a little thought is given to the arrangement of the 2 x 4's. The finished forms are set, but not nailed, on a platform made of 1-inch lumber.

The concrete for flagstones contains 4½ gallons of water to the sack of cement when ordinary moist sand and pebbles are used. When the concrete is made with dry materials the water is increased to 5½ gallons per sack of cement. With wet sand and pebbles, however, the water is reduced to 3½ gallons. It is important to keep the water within the amounts given, since strength of concrete is controlled by the ratio of water to cement.

In most cases a satisfactory concrete can be made by using 2 parts of sand and 3 parts of pebbles to each sack of cement. If this mixture is too stiff add more water and cement in the proportion stated. If it is too wet, however, add more sand and pebbles.

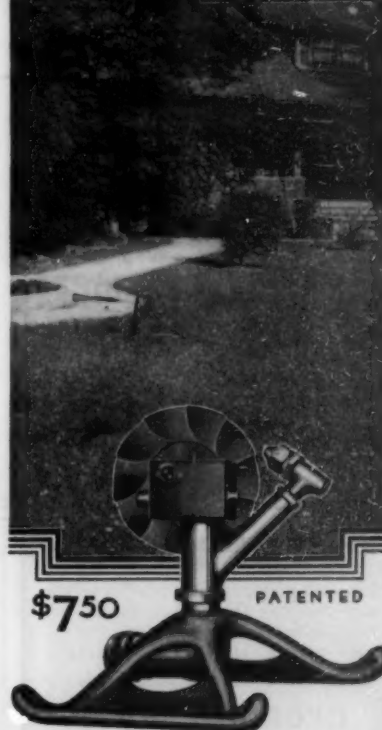
One hundred square feet of concrete flagstones 4 inches thick can be made with 9 sacks of cement, 18 cubic feet of sand, and 27 cubic feet of pebbles or crushed stone, provided that aggregates locally available in the proportions given make a satisfactory concrete. Since these proportions may require some changes, the amounts may vary slightly.

If colored flagstones are desired they may (Continued on page 541)



The individual forms can be made to vary in size and shape depending upon the effect desired

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S. G. HARRIS
Box A Tarrytown, N. Y.

Man-made flagstones

Continued from page 539

be secured by mixing a small amount of mineral pigments in with the concrete. If pigments are used, two precautions must be observed: first, do not use any but approved mineral pigments, and secondly, limit the amount of pigment to six per cent of the volume of cement. While larger proportions of pigments can be used safely in some cases, excessive quantities generally weaken the concrete.

OIL THE FORMS

Before the concrete is placed in the forms, the surfaces that will come in contact with this material are painted with oil. Old oil from the crank case of an automobile will do for this purpose. The object of the oil is to prevent the fresh concrete from sticking to the wood and making the form difficult to remove.

When the concrete is deposited into the forms, it is worked with a trowel or some other tool so that the corners will be filled. It is then leveled off with a strike-board that rests on the sides of the forms. Before the concrete hardens it is finished with a wood float. This is simply a wooden trowel that has a rectangular surface. The object of using this is to secure a smooth but gritty surface on the finished flagstones.

The stones may be built in the basement, in a barn, or out of doors. If they are cast in cold weather,

it is advisable to build them in doors, since the concrete must have adequate warmth in order to cure properly.

When stones are cast during dry weather they should be covered with damp straw or burlap so that they may secure adequate moisture.

The stones may be removed from the forms forty-eight hours after they have been cast. It is usually advisable to defer placing them in the ground, however, until at least seven days after they have been made.

PLACING THE FINISHED STONES

There are two methods of placing the finished stones. One method is to dig an excavation for the entire area of the proposed walk, to set the stones in it, and to fill the spaces between them either with dirt or with gravel. The other method is to dig individual holes for each stone. Either method is satisfactory.

Another method of making flagstone walks is to dig irregular holes in the ground and place the concrete directly in them. The material is leveled off and smoothed with a wood float as it is when the stones are made in molds. The holes should have perpendicular sides and be at least four inches deep to secure the best results. The same concrete is used for either type of flagstone construction and the effect in either case is good.

In and about the garden

Continued from page 532

Here is a hint pertaining to the control of Dandelions that I am glad to pass on. It is such a simple and so practical a remedy.

A pinch of sulphate of ammonia (as much as can be held between the fingers and thumb) upon the crown of a weed in the lawn, such as Dandelions, will quickly and completely kill the weed, says Dr. E. P. Deatrick of the West Virginia University. A little grass close to the weed will be killed too, of course, but the grass bordering the killed circle is so tre-

mendously accelerated that in a short time the spot is covered with a new thrifty growth of grass.

The importance of actually killing the entire underground root of the Dandelion plant is not fully realized. Cut off the top in the easy-going casual manner, merely removing the rosette of leaves and flower buds and you simply increase the growth below and get at least two where but one grew before. The Dandelion plant must be thoroughly eradicated to effect a cure.

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